THE

PALESTINE EXPLORATION FUND

NOTES AND NEWS.

THE Report of the Meeting of General Committee held on November 30th, will be found on page 5. The single Resolution, for the discussion of which the meeting was summoned, was carried unanimously. It now remains to give it effect by organising and despatching an expedition to survey Eastern Palestine.

In order to show exactly what is proposed to be done and why, it has been ordered by the Committee that the papers laid before that meeting should be all sent to every subscriber to the Fund, past and present. They are thereupon enclosed with the present number of the *Quarterly Statement*. The comparative map needs no comment: it shows the difference between a piece of country before and after it has been surveyed. The Prospectus of the new Survey will be found to carry on the work of the Society on the lines laid down in the Original Prospectus. The reasons for undertaking the Survey, the things which have to be done, the things which have to be sought, and the things which may be hoped for, will be found enumerated in the speeches made at the meeting of the Jerusalem Chamber.

The Committee earnestly hope that, while the programme of their new expedition will show their present subscribers that their work of Biblical Illustration is not yet done, former donors and old subscribers will renew their support and carry this Survey also to a successful conclusion. The magnificent map of Western Palestine now before the world is a sufficient pledge and guarantee of what will be done in the East.

The *Quarterly Statement* will, as before, contain reports and letters of the officer in command of the expedition.

The Committee have the pleasure of announcing that they have invited M. Clermont Ganneau, who will shortly become a resident in Palestine, to furnish them regularly with an account of everything that is discovered, attempted, or undertaken in archæological research in the Holy Land. M. Ganneau has accepted this invitation. His first letters will probably appear in the April number of this Journal.

Nothing more has yet been received from Jerusalem with regard to the Phœnician inscription found in the Pool of Siloam. M. Ganneau has made out that it consists of at least eight lines. He has also traced about thirty characters, all in the Phœnician character of the Moabite stone.

The drawings and plans for the first volume of the memoirs are now completed. It may be looked for about the end of January. There will be, it is hoped, no such delays in bringing out the other volumes. That of the name lists will be published at the same time, or very shortly, after the first volume of the memoirs. It will be followed most probably, by Colonel Warren's volume on Jerusalem research.

We have received a very interesting and valuable number of the *Zeitschrift* of the German Palestine Exploration Society. A summary of this number will be published in April.

The appearance of Mr. Oliphant's book on the "Land of Gilead" is happily timed for those whose attention will now be turned to the land east of the Jordan. If anything were needed to show, more clearly than the Prospectus and the Report of the Meeting have shown, the necessity for our Survey, a perusal of this volume would furnish the last argument. Everywhere we read of bad maps, unknown districts, places where no European has ever been, ruins which have never been examined, strange people, and wild traditions. The "Land of Gilead," illustrates the remark made by the Dean of Westminster at the late meeting, that East of the Jordan lies a land of mystery.

Another event of the quarter is the appearance of Colonel Warren's new book on "Jerusalem Topography." It is already well known that the author holds views on the subject diametrically opposed to those advocated by Mr. James Fergusson in his "Temples of the Jews," and other books on the same subject. The new work is essentially controversial, and as such, will be found a valuable addition to the literature on the sacred sites.

The Rev. H D. Rawnsley writes as follows:—"May I call your attention, and the attention of all interested in your work to the very great need that still

remains unsatisfied, so far as I know, of some authorised list of (1) objects to be sought for; (2) places to be identified; (3) observations to be made; (4) questions to be asked; (5) names to be inquired into, which could be obtainable either at your office, or at the consulates of Cairo, Beirout, and Jerusalem by any or all travellers in the Holy Land. Such a list would of course be varied from year to year, and if with it, these instructions could be given for the taking of temperatures, altitudes, levels, preparation of squeezes, rubbings, plants, and geological specimens for examination at home, the chart or list would be of the greatest service to the amateur but willing agents for such work that each year send out to the East."

The above valuable suggestion will be acted upon as speedily as possible. Such a list with such instructions will be prepared as soon as possible, perhaps in readiness for the spring travellers in Palestine, who are hereby invited to apply for it at the office of the Fund. Col. Warren will superintend it.

The second issue of the Great Map is exhausted. The third is being prepared as rapidly as possible.

The promised pamphlet "On Some of the Biblical Gains from the Survey" is published with this number of the *Quarterly Statement*.

Mr. Saunders' "Introduction to the New Survey" will be ready in a few weeks.

The Committee are most anxious that the Map should have as wide a circulation as possible. The Subscribers to the Fund may greatly assist them by advising the Map to be ordered for public libraries, school and college libraries and institutions.

It is also greatly desired that *all* those whose contributions have enabled this great work to be completed, may have an opportunity of seeing it. Arrangements have been made with the Rev. James King, of Berwick, for explaining and lecturing on the Map and its uses, during the winter. The Rev. Henry Geary is also ready to give one evening in every week to the Society, provided he be not invited to go too far from London.

The Reduced Map of Modern Western Palestine is promised by the engravers for February; it will be rapidly followed by the two ancient maps, already announced, on the same scale. A book has been opened at the office of the Society for the entry of names. The price is not yet fixed, but it will be as low as possible for subscribers.

The Cheap Edition of "Tent Work in Palestine," has been published by Messrs. Bentley and Son. All the small illustrations which were in the Library

Edition, and two of the full-page drawings, will be found in the new Edition, which has also been carefully revised by the author. An additional chapter has also been added on the "Future of Palestine." The work will be read with greater interest now that the progress of the Survey may be followed on the Map.

The income of the Fund from all sources, from Sept. 20th, 1880, to Dec. 13th, 1880, was £798 9*s*. 9*d*. The amount in hand at the last Committee Meeting was £1,212 3*s*. 3*d*..

It is suggested to subscribers that the safest and the most convenient manner of paying subscriptions is through a bank. Many subscribers have adopted this method, which removes the danger of loss or miscarriage, and renders unnecessary the acknowledgment by official receipt and letter.

Subscribers who do not receive the *Quarterly Statement* regularly, are asked to send a note to the Secretary. Great care is taken to forward each number to all who are entitled to receive it, but changes of address and other causes give rise occasionally to omissions.

While desiring to give every publicity to proposed identifications and other theories advanced by officers of the Fund and contributors to the pages of the *Quarterly Statement*, the Committee wish it to be distinctly understood that these rest solely upon the credit of the respective authors, and that by publishing them in the *Quarterly Statement* the Committee neither sanction nor adopt them.

MEETING OF THE PALESTINE EXPLORATION FUND.

Jerusalem Chamber, Westminster Abbey, Tuesday, November 30th, 1880.

THE DEAN OF WESTMINSTER IN THE CHAIR.

THE Secretary read the Minutes of the last meeting, and laid before the Chairman, letters of regret at their inability to attend from the Archbishop of York, Lord Talbot De Malahide, the Dean of Lichfield, Rev. Canon Tristram, Rev. H. Hall-Houghton, Mr. W. Morrison, Mr. A. Lloyd Fox, Mr. Laurence Oliphant, Rev. W. F. Birch, Colonel Cooke, C.B., R.E., and many others.

The following is the letter received from Canon Tristram :—

DURHAM, *27th November*, 1880.

Dear Mr. Besant,—It is with extreme regret that I have to write to tell you that my duties here prevent my carrying out my intention of attending the meeting on Tuesday, to plead the cause of the Exploration of Moab.

I can, from personal observation, confidently state that no part of the country affords such virgin soil for the exploration as the rich and lofty table-land East and North-East of the Dead Sea ; nor is any portion likely to produce more important results. With the solitary exception of the fortress of Kerak, the land has known no settled inhabitants since it was swept nearly 1,300 years ago by the Persian destroyer, Chosroes. It is much as he left it. Time has done its work slowly and gently, unaided by man, for the great destroyer is not the Nomad, but the subsequent builder, who employs old material and adapts what he finds to his own use.

Moab is absolutely strewn with ruins above ground, and honeycombed with cisterns. The ruins are not desolate heaps or grass-grown mounds. Pillars, arches, churches, streets, remain only partially damaged, and I have often scrambled over the vaulting which still covers the ancient streets.

The names of the towns remain for the most part in their Semitic form in the vernacular of the wandering tribes. There are ruins like those of Shihan, undoubtedly megalithic, like the older remains of Bashan ; there

are many which tell of the Syrian occupation and the flourishing epoch of the Maccabees, while Roman, both pre-Christian, and of the Byzantine period, churches, towers, and basilicas abound everywhere. Here too we find the unique work of Chosroes, alone in its desolation, the marvellous palace of 'Mashita.

I sincerely trust that earnest and zealous support will be given to the proposed enterprise by every lover of the Bible and of Eastern history.

Believe me,

Yours very truly,

H. B. TRISTRAM.

The Chairman called upon Mr. Glaisher to propose the Resolution of the day.

Mr. GLAISHER. Mr. Chairman, and friends :

When the completion of the map of Western Palestine was drawing near, and the several memoirs were in a state so advanced that we felt certain of their completion ; the attention of the Committee on different occasions was directed to the completion of the Survey of Palestine, taking into consideration the present state of our knowledge with respect to the eastern side of the Jordan. You are well aware that the Americans had undertaken to make that survey, but when I point out to you the maps that they had sent in to us, of which here are several, and when I tell you that an endeavour to connect the points that were common, revealed discrepancies so large in amount that it was not possible by any amount of coaxing to connect the one with the other, you will agree with me that it became evident that if the eastern side of Palestine was to be surveyed and explored, the work must be begun *de novo*, using the maps as reconnaissance maps and no more.

Then the Committee on different occasions met, and this pamphlet (the "Survey of Eastern Palestine,") was prepared, which, I believe, has been sent to every gentleman present, and perhaps under those circumstances I need not read it, but it may be taken as read. This paper shows that the country on the eastern side of the Jordan—Eastern Palestine—is very full of interest indeed. There are many ruins, and the photographs, which may be seen by looking about the room, taken by the Americans, may lead one to the thought that there are many others which they have not visited, that much information is to be gained, and that, if careful explorations could be made of the ruins on the Eastern side of Palestine, many very valuable results would follow. Then the monetary question arose. It is a question which has frequently cropped up. It came before us when, ten years ago, we met in this room just before we began the Survey of Western Palestine ; but we now have large experience that we had not then, and probably the future will be very like the past. I should like, while upon this point, to speak of the subscriptions and donations that we have received. In the year 1872 we received £2,441. The party then took the field, and the next year, in consequence of that, I believe, the amount was increased to £3,170 ; the

next year £3,382 ; and in 1875 £3,971. There was an attack made upon the party that year, which prevented our party going out in the year 1876 ; and the consequence was the amount of donations and subscriptions fell £800. In the year 1877 the party went out again, and the subscriptions rose £200, and in 1878 the amount was £3,751. The greatest expenditure in any one year was £2,951 on the part of the Survey ; but then we had a party at work at home, and a party at work in the field. We had then the invaluable services of Lieutenant Conder, who has made, I may say, a lifelong study of biblical knowledge and of biblical association, leading to invaluable results to the Fund. It is a great pleasure to me to think that he, with his increased knowledge, may be at the service of the Fund, and that if we begin the Survey of Eastern Palestine, I am led to hope that he will be able to take charge of it. I feel confident that nothing will escape his attention, and that he will give that intelligent interpretation to facts which has always weighed hitherto, and will weigh in future with this Committee. Now, sir, the years of the Survey were 1872, 1873, 1874, and 1875, and as I have told you, in 1875 an attack was made upon the party by the Arabs, so that we had no party in the field in 1876. In 1877, Lieutenant Kitchener went out and completed the Survey, and in the year 1878 and 1879, when our funds had decreased, the office work was done at home. The interest of the subscribers never flagged whilst there was a party in the field, but it must be remembered that while it is important for the party to take the angles carefully, it is quite as important to do the office work at home by computing the sides of the triangles of which they were part, and to lay the results down as we have done upon the map. The map is a splendid piece of work, very accurately performed, and is something that the Executive Committee feel, and I think justly feel, proud of. But we are ambitious. We are anxious to have the other side of the Jordan explored with equal or if possible greater thoroughness.

Now what are the expenses ? The working expenses for the years 1872–1877 were £2,675 a year, so that during the five years the expenses were between £13,000 and £14,000. I believe that for £13,000 or £14,000 we shall be able to have a map on the other side as accurate as we have it on this. When I was here ten years ago, the map I hold in my hand represented what we knew of the topography of Western Palestine. How great is the difference between our state of knowledge then and our state of knowledge as shown by the large and beautiful map upon the wall !

That which we are most desirous of doing, as we are now free—as we can give our undivided attention to the work—as we have trained officers who have their hearts thoroughly in the work, is to see if we cannot complete on the one side of the Jordan that which we have done on the other. Now the plan hitherto adopted has been to keep the party continuously in the field ; but it has been suggested by the Committee that perhaps a better plan would be to keep the working party in the field for the best six months of the year, and to have five months at home, doing office and other work, the other month being devoted to the going

and coming. If this plan were adopted the result we might look for, might perhaps be stated thus. Firstly, we should have the maintenance of the party for only seven months in the year ; secondly, we should give the party a beneficial change of air and rest ; thirdly, we should enable the work to be got up, and portions finished off, and probably some put into the engraver's hands ; fourthly, it would give the Committee better means of estimating the expenses and inquiring into methods of work. If this plan were not adopted, I do not think the expenses could be less than they were formerly—that is, about £2,700—and if our office and all other expenses are taken into account, you will see that we should require between £3,000 and £4,000 a-year to carry out satisfactorily the objects which we have in view. If, however, the early return of the party were resolved upon, we might perhaps save £400 or £500 a-year. These are matters to be considered. Money, of course, is an important element to be regarded, but I cannot think that while the money is economically used, we shall have any trouble in procuring the necessary amount. The past leads me to feel confident that if we do our work steadily, faithfully, and well ; gaining information upon biblical points (and looking at this pamphlet it will be seen that there are a very large number of biblical associations of the highest interest, upon which we may hope to gain information), we cannot have much trouble or difficulty in procuring the money that we may require. Therefore, sir, without further remark, I would beg to move—That it is now desirable to take, without delay, the Survey of Eastern Palestine, under conditions similar to those which have been proved to be thoroughly successful in the case of Western Palestine. (Cheers.)

Mr. Macgregor. Mr. Chairman, I do not think we require to convince any person around this table of the importance of the work which it has been proposed should be begun. If this were a meeting of the general public, who may be more or less ignorant of our work, and who would require to have descriptions given, what we might have to say would be very different. The great success which has hitherto been attained must afford cause for mutual congratulation, and I am sure the Dean will feel that it is deserved, especially by those who have worked hard—the Officers and the Committee—those who have gone away and those who have stayed behind. The great success gained should be an incentive to further efforts, because "nothing succeeds like success." Certainly it would never have done to have taken the Eastern side first, but now that we are strong upon the West, and can point to the results, our progress to the East becomes an absolute necessity.

Thirty years ago I went to Palestine in the ordinary way, and but twenty years afterwards, I went in another way on the water. At that time the maps were very deficient ; I had the great privilege of the gift by Captain Warren, now Colonel Warren, of a little photograph of a map that had been made of the Sea of Galilee. This I copied, and put into a book on half-inch scale. That was invaluable of course, especially as it was to be used on the water. I have brought here one of a great

number of maps that I had copied in the British Museum, and this was the best. It was rather old. It is the map of Seetzen in A.D. 1732, and is rather amusing to look at. But although that may appear ridiculous now, it was the only thing to be had some time ago, and we shall look back, I hope, in another year or two to the time when we had only those imperfect maps which are now superseded by the splendid map before us.

Our work in Jerusalem will greatly depend, I think, upon the success of the Map and the Memoirs, and I suppose political matters are now sufficiently quiet to hope that this, at any rate, will be allowed, and that Colonel Warren and others will swing down these shafts 90 feet under the ground, and feel as happy as he used to be when he was suspended there by a rope at the top.

I am very sorry that the Eastern part will be a little impeded by the illness of Mr. Oliphant, who was to have been here to-day, and I am not able at all to plead in his stead, having little of his knowledge of the subject; but he was so unwell that he was persuaded not to come. His book will, however, be out on the 7th of next month, and from what I have seen and know of it and of him, and from what we have already heard in an indefinite way, it will be sure to be interesting. It will come out at a very happy time for us all, when this work is about to be begun in the Land of Gilead, and I hope that a work of this description will make the place so interesting that the publication will come opportunely for the Fund. There is also another very remarkable work in connection with the Fund in one sense. *The Jewish Chronicle*, a well-known paper belonging to the Jews of London, and two or three other newspapers in foreign lands, are turning their attention to the East country, not only because of its general interest, but for purposes of future settlement and cultivation. It is too soon yet to say more than that there is to-day a very strong feeling on the part of many influential persons that something should be done in England which would enable the Jews to go back to Palestine. Where they should go, and by whom they should be maintained, and for what exact purpose, is of course no within our province to declare or to suggest, but it is, I think, within our province to remember that a Map and a completion of the Memoirs of the East might be even more useful to them than the Map of the Western part, seeing that the Western part is on the whole at present not considered so adapted for settlement as are the provinces on the Eastern side of the Jordan.

Now there is one congratulation that I think ought to be made at this particular period of our progress, and that is, that whilst the Committee get some thanks—and the Executive Committee try to deserve some too—I think we ought all to thank our Secretary for the extraordinary attention he has given, and for the work that he has successfully accomplished (applause). It is only necessary to see him as we do in the Executive Committee to feel that this tribute will be cheerfully accorded to him by the Chairman and the Committee. (Hear, hear.)

It is a striking thought too that in this year, and in this Chamber—the Dean will correct me if I am wrong—the revision of the New Testament is in progress.

The Dean of Westminster. It is completed.

Mr. Macgregor. We have it from the chair that it is now completed. That is a remarkable addition to the wonders of this year. Now the map is published, and the revision is completed, the two will go hand-in-hand, and each will help the other. Combined they form a picture Bible—a correct picture Bible—and those who know how many picture Bibles there are that are full of mistakes, will be delighted to find that at any rate, as regards the map, it is as correct as it can possibly be made. An erroneous picture Bible is one of the worst things for children to use, and a correct map of Palestine must be one of the best things for students to be guided by. The work that has been done is commended on all sides, and we can only hope that our American friends will resume in some other shape what they have confessedly failed in doing at the present moment. This cannot be for want of will. When we think that the whole of Palestine that is now surveyed, is only the size of Wales, and that the whole of Jerusalem within the walls would go into Hyde Park ; it is a wonderful thing if the two great nations of the world, receiving assistance, as they do, from Germany, Sweden, Norway, and other Protestant countries, cannot finish the work that has been so well begun.

There is one suggestion I would make, and it is only a suggestion. No doubt the Executive will consider it afterwards. I happened to be yesterday with the new Lord Mayor, asking from him the use of the Egyptian Hall, for a meeting on behalf of the monument to the Martyr Tyndale. Now it is a matter for the Committee of the Palestine Exploration Fund to consider whether, having done a good deal among the *literati* and the universities, we should not also have a meeting in the city upon this subject under the presidency of his lordship—an earnest Christian man ; and we should then be able to go to one of the most powerful communities and which is sometimes called the largest Protestant Church in the world—that is the Wesleyans—those in America being assimilated to, if not actually part of the same body as those who are in England. We may well hope that the Lord Mayor would be as kind in giving us the use of that place and his presidency, as he has been for the other great purpose I have named. I wish all success to the Fund. It is a great privilege to work with such kindly associates ; we never have a quarrel, and our Chairman would keep us in order if we had. (Applause.)

Mr. F. A. Eaton. I am afraid, sir, the only excuse I can have for saying a few words, is that I am one of the very few persons who have had the good fortune to visit the countries east of the Jordan. It is now more than eighteen years ago. We were a party of seven, travelling along the beaten track in Western Palestine, when, thanks to a letter of

introduction which two of us had from you, Mr. Chairman, to the Protestant missionary at Nazareth, M. Zeller, our plans were suddenly changed, and under the guidance of that gentleman, we struck eastwards across the Jordan by the Jisr Mejâmieh, traversed the Ghor to Pella; thence forded the Yarmuk, and ascended the hot springs of Amatha to Um Keis; rode along the well-wooded slopes of Jebel Ajloon (Gilead) and the fertile plains of Bashan and the Haurán to Mezarib, Derá, and Bozrah of Moab. Near Bozrah, our route lay through the other two subdivisions of the Haurân, the Jebel el Druze, or Ard el Bathaneeyeh, the land of Batanæa, and the el Lejah, the Hebrew Argob and Greek Trachonitis, to Damascus. We paid no backsheesh and we had no escort, but trusted to the hospitality of the Arab and Druse Sheikhs, with whom M. Zeller was well acquainted, and all of whom entertained us right royally. Though our journey was a hurried one and only lasted a fortnight, and though it took us through but a small portion of Eastern Palestine, it was quite enough to show us that though not so rich in Biblical associations as Western Palestine, Eastern Palestine was infinitely richer in archæological remains. For one monument on the western side there are probably a hundred on the eastern; nor have they suffered so much at the hands of man. Neither the Crusaders, the Byzantine Greeks, nor the Arabs have played such havoc in the east as in the west. In the Haurân may still be seen those massive stone buildings, the materials of which, however comparatively modern their arrangement and decoration were, it may be reasonably presumed, chiselled in a far more remote antiquity. It is no uncommon thing to see these houses in a complete state of preservation built of huge blocks of black basalt with slabs of the same for the roof, 12 feet long, 1½ feet wide, and ½ foot thick, and entrance doors also of basalt, hung on the ball and socket principle; great solid stones of the same material being used as lintels at the top and bottom. I remember seeing some folding-doors of this kind at Damá, in the centre of that wonderful island of rock, the Lejah, which were 10 or 12 feet high, and 8 or 9 inches thick, and which turned in their sockets with the greatest ease. It may, indeed, be said that inexhaustible possibilities await the explorer here; but time, great philological experience, an intimate acquaintance with Arabic dialects and with Hebrew, a trained and practised eye, and great care, are absolute essentials towards making a proper use of them.

If I am not detaining the meeting too long Mr. Dean, I should like to read a short extract or two from a letter I have just received from that eminent Semitic scholar, M. Clermont Ganneau. I have only had time to glance over it, but, with your permission, I will roughly give the meeting an idea of a few of the things he says:—

M. Ganneau is quite sure that all the countries on the East of the Jordan, if properly examined, have many surprises in store for the explorer, and that though we may not discover the iron bed of Og, King of Bashan, there is every hope of finding some basalt sarcophagus with a royal inscription like that of Eshmunazur in the Louvre. He lays great

stress on what he calls the onomastic traditions of biblical countries, and on the tendency of autochthonous tradition, a tendency very marked in all Semitic races, to think of and to consider as geographical entities those who were more or less connected with the history of the country. As for instance that the name of the modern *Belka* is the same as that of *Balak*, King of Moab; that *Shihân*, where M. de Vogüé found a magnificent bas-relief of a king, is the same word as *Sihon*, the King of the Amorites; the *Aujeh*, an effluent of the Jordan, as *Og* the King of Bashan; *Ajloon* as *Eglon*, King of Moab; the town of *Shobek* as *Shoback*, one of Hadarezer's generals; *Bela*, the old name of Zoar, as *Bela* (cf. *Balaam*), the son of Beor, King of Edom; while the name of *Lot* survives in *Kaum Loot*, the people of Lot, *Madueen Loot*, the Pentapolis, and *Bahr Loot*, the Dead Sea. M. Ganneau also connects the towns of Rabbath and Zoar or Segor with the two daughters of Lot; to use his own words, "la grande et la petite, l'aînée et la cadette, *Bekira* et *Seghira*, *Rabbetha* et *Seghirtha*," who according to the Judæo-Mussulman tradition gave their names to the two principal towns of Ammon and Moab. Another very important point to which M. Ganneau draws attention is the possibility of finding at Pella monuments relating to the very earliest Christian times. He also directs attention to the topographical value of the milestones which bordered the Trans-Jordanic Roman roads, and the necessity for carefully searching for them; one that he knows of near Ajloon bears a long inscription, with the name of the place and the distance in miles.

These are some of M. Ganneau's remarks, and they seem to me so valuable as showing what a rich store of interest awaits the proposed expedition, that I trust, sir, you and the meeting will pardon me for having so long detained you.

Mr. Douglas Freshfield. Mr. Chairman and Gentlemen: I have responded to your kind invitation to come here to-day and say a few words about your proposed exploration of the east side of the Jordan, with great pleasure, and the more so because for the last ten years I have had these few words more or less burning within me. It is quite ten years, I think, since Mr. Morrison asked me to come and speak at one of your annual meetings in Willis's Rooms. When I got there I was asked what I should talk about. I said "The east side of the Jordan." "Oh!" said the Society, "that will not do at all, because we have got something else on hand." Well, of course you were perfectly right to do what you had on hand, and to finish it in the way you have done; but I confess at the time I was disappointed, because it seemed to me you were putting off and handing over to the Americans what was the most important and likely to be the most useful part of all your work—the exploration of the country east of the Jordan. In saying this I should like to guard myself against being thought to slight in any way what has been done already. I think the map before us is one of the most admirable bits of private work I have ever seen, and I have used maps a good deal. I am quite sure, speaking as a member of the Council of the Geographical Society, that when we next award our

annual medals that map will be brought before us, and we shall carefully consider amongst others, the claims of its maker or makers to distinction. But, good as this work is, it seems to me that when you get across the Jordan your work will be still more valuable. What has been accomplished may be spoken of—roughly only of course—as a work of correction of previous authorities; but when you go to the other side your map will be a creation. The old maps of the eastern side are practically worthless, and this fact may be illustrated by what happened to myself. The first day we left Es Salt we tried to ride over the hills by Van de Velde's map as I had been accustomed to do in Western Palestine. We immediately lost our way and—the story has a double bearing—in doing so we came upon some ruins which I had never seen described before, and which I am not at all sure have been described since, and that is what you are constantly doing on the eastern side of Jordan. Then during the next two or three days we found rivers two or three miles out of their proper course, and villages on the wrong side of them—Roman roads not marked, or wrongly marked; in short we had the most convincing evidence of how much a good map was wanted.

As to archæology it seems to me that there is scarcely any limit to the new knowledge that you may hope to collect by the identification of sites and the collection of inscriptions. When we get a complete set of photographs (those on the table already show how much may be done in that way) we shall be able to tell whether any remains of primitive architecture really exist under the accumulations of Roman and Arabic civilisations. We shall certainly be able to bring before the eyes of English people what has been partly brought before the French public by the Count de Vogüé's beautiful book—it has often been a source of wonder to me no translation of it has been published in this country—in which there is a picture of a Roman town in the early centuries of our era almost as perfect as you get from Pompeii. Moreover, I think you will find the work not very difficult to carry through. One advantage you will have. Suppose the tribes come up and the country is dangerous—though I do not assume this will happen, refuge may be taken in the hills of Jebel Haurân, which will afford, not only a place of retreat, but a sanatarium probably, at all seasons of the year perfectly healthy.

As to photography, I should like to add one remark. It seems to me extremely desirable that, if possible, one member of the expedition should be a good photographer. The other day we took steps at the Geographical Society which may result favourably in promoting that result. We referred it to one of our Committees to make arrangements by which intending travellers could be easily and cheaply instructed in London in photography. We should be very happy if one of the first instructed was a member of the Palestine Exploration Society. I will only add that the gist of what I have meant to say is this—that I think to stop now after your work would be a thousand pities—it would be like leaving off reaping in a field just when you have got to the very thickest part of the crop. (Applause.)

Colonel Warren. Mr. Chairman and Gentlemen :—

The undoubted success attendant upon the sale of the new map, and the demand that has occurred, appears to justify the course which it is now proposed to pursue of extending our work to the other side of Jordan. As far as I am concerned myself, I should strongly have advocated the continuation of this work, even if we had not the prospect of such a success as it has been, because I think as our work is the elucidation of the Bible, there is no doubt that many persons would have made up any deficiency ; but when we find that the public is entirely satisfied with the work, and there is already by the sale of the maps a small profit being made which may be placed to the credit of further work, it is undoubtedly our duty to continue our labour to the end, and not to take our hand from the plough.

When we look at the map before us, we must acknowledge that it is a very beautiful specimen of work. We know that it is extremely accurate, and we must feel and acknowledge that it reflects the greatest credit upon Lieutenants Conder and Kitchener, the accomplished surveyors who have produced it ; and I am sure we must all hail with great gratification the prospect of Lieutenant Conder being employed on this work a second time. It is not only as a surveyor that Lieutenant Conder's services are so valuable ; he unites to his professional attainments a knowledge of the people ; he is intimately acquainted with their manners and customs ; he knows their country, and, last of all, he is a student of the Bible. He knows the nature of the information which is specially wanted, and he can make a shrewd guess as to where things are to be found. I feel assured myself that the success of the expedition will be attained by retaining the services of Lieutenant Conder if that can possibly be arranged. I do not wish to infer in any way that we ought not to throw upon our surveyors the duty of making identifications, etc. ; for I think it is their business to collect all the information they can possibly find and bring it home, and let scholars in England form their own deductions. But there is no doubt it is of the greatest advantage to have in the person of the surveyor, an officer like Lieutenant Conder who knows a clue when he sees it, and can follow it up, and who is not likely to let slip any chance matter which may come before him which would lead to good results. When we look upon the east of the Jordan, we find a country there far different to that on the west for surveying purposes. It is not broken up in the same deep woods and valleys as that on the west. It is in a great measure a table-land elevated 3,000 feet above the Mediterranean, and is well watered and well wooded. It is, too, comparatively healthy ; and in fact, in the summer of 1868, I took my party over to the east side actually to the benefit of their health. I think on that account, the Survey on the east side will be found much more pleasant work, and the triangulation that has taken place on the western side will be found of very great service to those on the east, and there are parts where the ground is level, and a base of verification may be very accurately measured.

I do not know whether we are all agreed upon the point to which the

Chairman of the Executive Committee alluded with reference to bringing the party home every year; I must say that from a surveyor's point of view, I should rather feel inclined to keep the party out at least one year or eighteen months. I think after that time, some of the party may get jaded or ill, and it may be necessary to bring them home; but I think the surveyors themselves, after they have been out there the first six months, will feel inclined to go on with the work, and would probably rather not come back, because they would be just getting into the very thick of it, as it were, and probably it would be as well for them to go on with it.

The climate on the eastern side is not like that on the west. During some of the summer months over this plateau there is a cool wind blowing, and sometimes for eight or ten days together the country is comparatively mild, and not in any way so unhealthy as the cauldron of the Jordan, or the shore of the Mediterranean.

With regard to the population, some have stated that there is likely to be a difficulty with the Bedouins. For my part, I think the fact that in this country, there are simply Nomadic population, Druses, and Moslems, is a great advantage. On the western side in the villages, there are Mussulmen of different kinds, and Christians of several denominations, Jews, Druses, Maronites, etc., and these people are continually intriguing and stopping the surveyor in his work in one way or another; but on the eastern side there are simply the Bedouin who are not fanatical with regard to their religion, and who are very fond of the good word of an Englishman. They have many very good qualities, qualities which Englishmen regard, and I have no doubt that very little difficulty will be found with them.

Again, people are inclined to say that this is not the time to go on with the work on account of the political complications that are likely to ensue; but we may ask when were there not similar complications apparent upon the horizon?—when was not the political horizon lowering in this direction? and one is tempted to cite the old proverb—"He that observeth the wind shall not sow, and he that regardeth the clouds shall not reap."

I can speak with regard to the numerous ruins which are on the eastern side, especially towards the country of Gilead. There, for many hundreds of years, hardly any change has taken place; in fact, scarcely any change, since many of these magnificent old temples were cast to the ground during the earthquakes previous to the Middle Ages. And we must not forget that many of these old temples, which date from the time of the Antonines, are made of old material; and there are architectural remains and mouldings which point to there having been a separate style of architecture in that country, previous to its occupation by the Romans. I feel certain myself, that when a systematic and prolonged search is made, some very remarkable results will be obtained. I think that the photographs which have been brought back, will in many cases show that there are some very ancient ruins—far more ancient than those of the Romans in that country, which are still to be brought to light; and my own impression also, is that among these splendid ruins about Mount

Nebo, and in the high places between Mount Nebo, and Rabath Amman inscriptions similar to that of the Moabite stone are likely to be found. It may be said, of course, that the finding of the Moabite stone was an accident; but we must acknowledge that one accident may lead to another accident: for instance, few can doubt that the recent discovery of that remarkable Phœnician inscription in the Pool of Siloam at Jerusalem, is due in a measure to the eyes of persons having been opened by the discovery of the Moabite stone.

I must congratulate the Committee upon the favourable circumstances under which it will now commence its third, or I may say, fourth expedition. Fourteen years ago, it was a society little known, and without money. Ten years ago it had become very well known, and had considerable credit; at the present time it is not only well known, and its reputation established, but it has a fixed income by subscriptions, which, if supplemented in a small degree—it only requires to be supplemented in a small way—will enable the Committee to carry out the work creditably to the reputation of the Society, and to the satisfaction of the public. (Applause.)

Professor Hayter Lewis. After what has been said by the different speakers of the architectural remains on the east side of the Jordan, and with the photographs about the room to give force to their remarks, I feel that there is really very little for me to add upon the subject. I will, however, call your attention to one or two points which have struck me very forcibly in considering what we should be likely to find on the east bank. There have been made quite recently one or two discoveries which may be regarded as remarkable. We knew of course from Irby and Mangles and others that scattered over the land, in different parts, there existed stone-monuments which you call prehistoric or unhistoric, according to the nomenclature you may prefer—but I think very few people indeed realized or knew much about them until the publication of Professor Palmer's and Canon Tristram's journeys. Few imagined that, scattered to a large extent through the land, were large monuments, stone circles, etc., just as one sees on the mountains of Wales and the hills of Scotland, the names and dates and everything connected with which are at present entirely unknown; and we may hope, after careful exploration (for I think few of them have been examined, and none of them have been carefully explored), to find some certain clue to the date, and the purpose for which these curious monuments were erected. The second surprise, I may say, to which I may allude in our time, was the exploration of the Haurân, described in that wonderful book of De Vogüé's to which Mr. Douglas Freshfield has alluded, and which can scarcely be praised too much. So far as it goes it is perfect. But it does not cover, or anything like, the ground we hope to cover, and I have no doubt whatever, that we shall find when the ground comes to be explored, remains which will amply repay in an archæological point of view, the cost, the time and trouble of exploration.

I do not say that it was a discovery, because of course we knew from Burckhardt, who was I think, the first who went there; and likewise from Cyril Graham and others, that these remains did exist, but it was an exceedingly cloudy sort of view that we had of them. Dr. Porter describes these cities, and many considered that we had in them the actual cities of Bashan; we now know them to date very shortly after the Christian era. A remarkable series of monuments, of which I say we had simply the most imperfect description in Burckardt's and other works, have been brought to light. The stone doors have been alluded to by Mr. Eaton, but I think very few persons know that we have one of them in the British Museum. I have been to the Museum over and over again with persons of scientific and archæological knowledge, but I never yet met with any one who had seen it. It is just at the entrance of the Egyptian room, and affords a specimen of the curious work which Mr. Eaton has mentioned.

Then a real discovery in our time, and one of the most valuable kind, was that made by Dr. Tristram in the palace of Chosroes at Mashita. It reveals to us a new style of work. It shows that in a desert—or at least in a place that no one seems to have visited before—we have one of the most magnificent remains of the particular time of Chosroes.

Now these few works that I mention give a sort of insight, I think, as to what we may expect to find when the country is carefully surveyed. At the present moment, to begin with, we have no remains, so far as I am aware, that you can call Phœnician architecture. That it was grand we may suppose from the description in the Bible of the work of the architect sent by the Phœnicians to do Solomon's work; but except from the sarcophagi I think we are almost thoroughly ignorant of it. I have seen what there are of remains in the museum at Algiers. Of course there is to be seen at that museum a very large collection of Phœnician remains; but all may be summed up in one line—a few inscriptions. There is nothing whatever beyond that. There is scarcely an architectural fragment; in fact, I think I may say that there is not one. At Carthage, I believe it is the same. But one must certainly hope very strongly that if we begin to excavate under these buried cities we may find some clue to what was the character of the ancient architecture of the Phœnicians; and more than that, I do hope that we may discover some clue likewise to what was, I will not say the architecture of the Jews, but the style of work which was practised by them. At present we know scarcely anything. Even the outline and the decoration of these two grand pillars which are described so often as being at the entrance of the Temple are simply matters of guess, and it is just possible that we may find in some of the *bas-reliefs* something which will help us to explain the most interesting problem about the Temple. I need scarcely remind any one here of the finding, as I may call it, of the seven-branched candlestick on the Arch of Titus. We all know how many drawings and restorations have been made of that seven-branched candlestick, and how entirely the whole were found to be incorrect when some genius suggested that we might on the Arch of Titus

find a correct representation. This was found, and we know it perfectly agrees with all the descriptions in the Bible, and it does not agree, so far as I am aware, with any representation which had been formed by guess.

I will not detain you any further ; there are other gentlemen who wish to address you, and who will speak with greater knowledge of the country than I can.

Rev. Dr. Ginsburg. Mr. Chairman and Gentlemen: It is with peculiar pleasure that I hear from such an authority as Mr. Glaisher and from others that we are seriously intending to explore the eastern side of Palestine. I was in that country, as probably some of you know, about six years ago. My experience there was not of the best kind. Probably we ought to thank ourselves for much of the inconvenience which we suffered from.

I have not the slightest doubt that remains are to be found in Moab, and in the whole region round about there, which will illustrate, not only the geographical and the narrative, but especially the linguistic part of the Bible. I have read some of the inscriptions that have been found. I must say that no inscription has ever been discovered which is of such extraordinary importance to the elucidation of the language of the Old Testament as the Moabite stone. For myself, I am convinced that the nation which dwelt in the place where such a stone has been found, must have been in the habit of erecting such stones to commemorate events ; that the erection of such a stone could not have been an isolated example, but that it must have been a regular custom among the people to erect such stones ; and therefore, though it was simply by an accident that this stone was discovered, there can hardly be any doubt that if travellers could sojourn in the place quietly, and live with the Arabs as the Arabs live, and not by their costly style of living, arouse the cupidity of the Arabs for baksheesh or the price of redemption (which was what they expected from us and was the reason why they took us captives) many valuable discoveries might be made. I met the late lamented Mr. Drake and others of this Palestine Exploration Fund, living like Arabs—simply, unpretentiously—and I believe if the same thing is done on the eastern side of the Dead Sea it will be quite as successful generally, and far more successful from a topographical point of view, and from a linguistic point of view, than on the western side. The Moabite stone more nearly approaches to biblical language, than anything I have ever seen. I speak with all humility when I say that any one who knows Hebrew would be able to read the inscription upon the Moabite stone, without the aid of a dictionary even. This is the first time we have ever discovered anything in the work of a kindred nation which comes so near the language of the Old Testament as the language of the Moabite stone. It will prove of the greatest service to biblical students, and to those who write on grammar and lexicography. Many terms which have come down to us as later Hebrew terms have now been established beyond doubt from the Moabite stone as belonging to an earlier period of the Hebrew language, and of biblical language ; and a great deal might be done in that way if the Society would only at the

same time take the hint which the Professor opposite me has given to examine into things that exist in museums in Europe. If this Fund were to make it a branch of its work to employ its members, or to ask its friends to look after these things, we should find that discoveries have been made entirely within our reach illustrative of Palestine. Only a few days ago a gentleman engaged in the British Museum, taking casts of coins, brought to me a coin which has been in the Museum for years, and which, if the Palestine Exploration Fund had known of it, would no doubt have sent some of its accomplished members to examine ; and on this coin—I submit it to you, Mr. Chairman—we have, as far as I can decipher, Jehu in his carriage. There he is, and the name Jehu in the old Hebrew characters exactly resembling the letters on the Moabite stone, only in fact more perfectly written. You will find Jehu consisting of three etters. On the right-hand side is *Yod* and *He*, and on the left-hand side of the figure is the vowel Vau, making Jehu. Then you have the chariot ; and I have the authority of the gentleman at the head of the numismatic department of the British Museum for saying that is the only winged chariot that has ever been discovered on any coin. Putting the date at the very latest, the period of this coin would be about 400 years before Christ. Now if we were to work on the spot carefully, and if the gentlemen who go there were to put themselves on friendly terms with the Arabs and the Bedouins, who knows how many coins of that or a similar description might be found, for it is well known that the Arabian and the Bedouin ladies wear their coins round their heads as ornaments ; and thus a whole vocabulary, and a whole list of biblical names might be discovered.

Professor Lewis has spoken of the want of knowledge on our part of Phœnician architecture. Here you have a specimen of Phœnician coinage, as I suppose it must be taken to be. The gentlemen at the British Museum think the coin must come from Gaza, and here you have a specimen of the way in which they have struck their coinage. The coin itself, as seen in the British Museum, is one of the best things of that period. How many such things await discovery in the unexplored and beautiful country which is to be the scene of the future labours of the Society ! The ravines are, it is true, very rough, but it does not take very long to get from the ravine to the top of the hill ; and, though you may in the ravine, experience a tropical climate, the moment you get on the hill, after three or four hours' climb, you are in a cold climate, where you can sojourn for the night, and be recruited for the work of the following day.

I therefore rejoice most heartily to hear that the Society has at last determined to go to work on the eastern side of the Dead Sea, and I have no doubt that the Society will stick to its resolution, and will manifest its determination and its zeal in a similar way to that manifested by the Society in exploring the western side of Palestine ; and I have no doubt that those of you who can advocate the cause of this Society in its exploration of the eastern side of the Dead Sea, will only too gladly help in that

way, and in other ways seek to bring about the accomplishment of this great work.

Professor E. H. Palmer. Mr. Chairman and Gentlemen: Much has been said by the previous speakers as to the important discoveries that we are likely to make on the eastern side of the Jordan in archæology, topography, and inscriptions, and with this I fully agree; but I should like to call your attention to possible discoveries which may be made in other directions—I mean in those of ethnology and philology generally, but especially as elucidating the Bible. During my own short sojourn Moab, I came across several very remarkable things. For instance, one of our own camel men bore the odd name of Fa'ūr, a name that does not exist in Arabic, that certainly is not Mahomedan, but is really letter for letter identical with the name of the old Moabite idol, Baalpeor. Again, I constantly heard from the Arabs the word Háreth, which means in ordinary Arabic, a ploughman, but which in Moab is always applied to the hills upon which most of the Moabite towns are built. In the Bible, we find the capital of Moab called Kir-Hareseth. Hareth in Arabic, and Haresh in Hebrew, are identical in orthography. I believe I am right in saying that the name Hareseth somewhat puzzled the commentators, but if it were read according to the local meaning of the word—the city of the hill, *par excellence*, we see at once the reason for its appellation, and we also find the curious fact of a local Moabite word existing in the colloquial discourse of the Arabs of the present day.

Another curious thing I found there, and which I have mentioned in my account of the country there—the so-called statue of Lot's wife, a curious rock by the shore of the Dead Sea, bearing, when seen from the distance, a curious resemblance to an Arab woman. This is called by the natives Bint Sheikh Lût—the daughter of Sheikh Lot—and it is a curious fact that in Moab the word Bint, which properly means daughter, is by the Arabs of the present day, nearly always applied to a wife. I do not lay much stress upon that, but it affords a significant comment upon the well-known story in the Bible of Lot.

Another thing is, that amongst the Arabs, those who have undoubtedly lived in the country for long generations, we find many names illustrating the old scripture records; as for instance, in Judges we find that two princes were slain, Oreb and Zeeb. In that very country to the present day, the ruling family of the sheikhs of the Adwan, the elder branch is called Deab, which is exactly the same as the Hebrew name in spelling, and means also "wolves." The other name Oreb in Arabic, Ghoráb, is likewise a common Arab tribal name. So I think we may hope to find even among these tribes many things which will shed light upon the scripture history.

What M. Ganneau has mentioned about the connection between names of places and biblical historical characters also struck me in many instances. I only at this moment remember one—the ruined city of Shihan bearing the same name virtually, as Sihon the King of Moab. I

hope that when the expedition is sent to these parts its work will not be confined merely to the study of the Jordan district but that the survey may be carried further southward—on the Eastern side of Arabia, where so much that is of intense interest lies, and where so many discoveries may, it is to be hoped, be made. Poor Drake and I, when we went through Petræa and worked our way up to Moab that way, came across more than one queer old town cut in the rocks—smaller examples like the large rock-cut city Petra—the Sela of the Bible—the city of the rock. There also in the neighbourhood of Petra lived a tribe of Arabs, or of fellaheen—half Arab, half fellaheen, who are called the Liyd theneh. Their lineaments, their habits, everything about them shows that far from being of the same stock as the other Arabs, by whom they are surrounded, they are nothing more or less than of Hebrew descent—in all probability a remnant of one of those numerous Hebrew tribes, who, after the dispersion of the Jews which followed the Roman conquest, fled into Arabia, and who played so important a part in the early history of Islam. To move among these people, to get from them their folk-lore, their language, and their idioms, could not fail to throw very great light both upon the language and the manners of the Bible. In the whole of the Eastern side of the Jordan, as Professor Lewis has remarked, we may hope to discover more of those wonderful Persian ruins of which Mashita is a specimen ; and I may just note in connection with this subject, that the Arab histories tell us very explicitly that the great palaces of Chosroes on that side of the Jordan were robbed to build the new city of Bagdad ; and I think it would be at least interesting if some of the travellers who go that way were asked to look amongst some of the ruins of the old Kaliphs' palaces to see if there might not be something that may have come from the other side of Jordan, and which may contain not merely relics of Persian civilization, but older material—Phœnician and Moabitic work which had been worked up by the Persians, and afterwards stolen and carried off to Bagdad. I will not detain you longer than to say that I think an expedition to that part of the Jordan cannot fail to be attended with the very greatest success so far as discoveries go, in topography, architecture, archæology, and in philology. As for the difficulty of dealing with the natives, I do not for my own part believe that there exists any at all. I found them perfectly easy to manage when I was there—much more easy to deal with, in fact, than the fellaheen in the villages on the other side. The Arabs have some peculiar customs ; for instance, what they call the blood-feud, and the making a man dakheel, that is to say getting from some one a guarantee of your safety which he must answer for with his own blood ; and if the traveller does but learn these few things, and deal with the Arabs as they deal with each other, he may go from one end of Arabia to another without running the smallest risk of any personal harm; and as for robbery and extortion he need fear very little of that, if, as has been suggested by Dr. Ginsburgh, he only has the good sense not to parade his riches, but goes about in a simple manner. I think that there would be no difficulty whatever in travelling in the country.

I can quite endorse all that has been said about the healthiness of the place, for I found it was quite possible to get from a very hot valley up into a mountain, and be snowed up there for a fortnight; and surely where one can count upon that elevation, and generally upon some snow, at any rate in winter, one need have very little fear of fever. There is nothing then, either in the country itself, or in the character of the natives, to throw difficulties in the way of the expedition, while the results may, I think, be expected to be even greater than on the other side—greater especially because as the country has remained comparatively deserted for so long, and has had, comparatively speaking, so few inroads and incursions from other nations that it has remained longer *in statu quo* than the country on the other side, where a continuous population has always lived, and where there have been so many immigrations and incursions and journeys of people, that Western Palestine was, for so many centuries, the highway between the East and the West.

Lieutenant Conder. Mr. President and Gentlemen: I feel that after so many distinguished gentlemen have spoken, that I have very little to say, especially as I have not been over the Jordan; but I think perhaps a few words as to the method upon which the survey might be carried out may be of interest. But first I should like to thank the Chairman of the Executive Committee and the other gentlemen who have spoken, for the very kind way in which they have spoken of my work, and for the appreciation which they have shown of the Map of Palestine. I thank them, but I cannot say that I altogether agree with them. I have very good reason to know that the Map of Palestine is a work that is far from complete. We know that there are many defects in the map from the top to the bottom, and I feel that if I were called upon to write a critique on my work I could write a very scathing one; but at the same time I think that I am right in saying that each and all my companions, including Mr. Drake —whose death we so greatly deplore—Lieutenant Kitchener, Sergeant Black, Sergeant Armstrong, as I know from personal experience, did his work thoroughly conscientiously, striving night and day and at all times to overcome the difficulties of the task, and that it was not for want of good-will and earnest endeavour on our part that the map remains in some particulars deficient. And this, I think, I may safely say with regard to the Map of Western Palestine, that although others may add to it, they will find very little that they will feel called upon to alter. Our object all through was not so much to be absolutely exhaustive, which would have been impossible, as it was to ensure that what we did put down was founded upon thoroughly good authority. The difficulties that we had to encounter I need hardly detail to the explorers who are present, who know thoroughly well that theoretical expectations at home are not always borne out by practical experience abroad, and who also know that what appears so hopeful and easy before one goes out is found to be surrounded with every sort of difficulty when one is on the spot. There are difficulties from the climate, difficulties from the suspicions of the

people, difficulties with the transport, and difficulties at almost every step you take. We had in the first instance, to overcome our own ignorance of the subject, and secondly, we had to overcome the suspicions of the natives and to make allowance for their extremely untruthful habits. Even in England we know that the Ordnance Survey encountered the greatest difficulty in settling the nomenclature of the maps in a satisfactory manner, and with these additional difficulties we found it one of the hardest of all the Survey tasks to procure names accurately. For that reason it was made a rule that, however tempting a name might be, it was not to be accepted unless it was proved by the concurrent testimony of more than one person; and I think we may say that we had the most satisfactory instance of the nature of the nomenclature in the case of Adullam. M. Clermont Ganneau, whose discoveries are very well known to you all —who has shown a greater aptitude for the recovery of ancient sites than anybody else, and whose identifications are probably sounder than those of any one who has been in the country since Robinson discovered the site of Adullam and recognised it under the name of 'Aid el Mâ. He gave me that information; and when the tracing of that part came in I listened with great interest to hear whether the name 'Aid el Mâ would turn up. I found that my sergeant had discovered the name on the place indicated, and I went to the place the next day, and I met a group of Mussulmen there; they refused to tell me the name; they told me we knew the name better than they did. After this party were gone we came across the shepherds, who were really the best authorities upon the point, and from whom I again obtained the name. In that case the men who had discovered the name did not know that I knew it; and yet that name was satisfactorily recovered; and I think we may say of the majority of important sites, that we obtained the real ancient names which are testified to by more than one person. There is no doubt that we learned a great many lessons in working out the Survey of Western Palestine. We learned the ways of the people, and even in the technical work we learned one or two points; and I hope, if the Survey of Eastern Palestine is accomplished by the party of explorers whom I had the honour of leading, it would probably be more satisfactory as a whole, than the Survey of the West. With regard to the difficulties of the country, and of the nationalities to the east of the Jordan, I think it was Mr. Freshfield who intimated that we should find the Druses very intelligent allies; and we should in the south be able to obtain the assistance of the Adwân Tribe, who are accustomed to Europeans, and who are one of the dominant tribes in the district of Moab. The only country I have not a clear idea about is Mount Gilead, but that is a comparatively small district, and I think there would be very little difficulty in dealing with either of those three great districts which comprise the survey which it is proposed to take. Most of the gentlemen who have spoken hitherto appear to have confined themselves to the consideration of the scientific part of the work. Perhaps I might be allowed to say that it appears to me that the scientific

side of the work is not that which has obtained the support which the Palestine Exploration Society have gained from the public. The reason why the public have supported the work of the Palestine Exploration Fund appears to me to be the illustration of the Bible. We know that the study of the topography of the country, of its natural products, and indeed the study of Palestine generally, has led to very important illustration of the Bible, and I have no doubt from what I have seen that the feeling on the part of the public that this is the work of the Fund is the reason of the great interest which has been excited ; and it is perhaps because it is supposed that on the Eastern side of the Jordan there is less biblical interest, that more importance has been attached to the scientific side of the work. But we must remember that, although only one-fifth of biblical names are associated with places on the East side as compared with the West, yet that the majority of those names on the East are those of unknown sites. Those in the West belonged often to sites that were known before the work commenced, and for that reason there is, I believe, a greater field for identification on the East than on the West. Then too, some of the most interesting and romantic episodes of the Old Testament are connected with the East. We have the pursuit of Gideon to Karkor ; we have the retreat of David to Mahanaim ; we have the wood of Ephraim, where Absalom was killed ; we have perhaps half-a-dozen of these histories which are full of topography, and which require elucidation to a very great extent. We have to find the site of Mahanaim ; we have to find the site of Ashtaroth Karnaim where the great temple of the two-horned Astarte was situated ; we have to find the site, or at all events verify the position of the site of Succoth where Jacob crossed ; we have to find the site of Jegar Sahaduta where his monument was placed, and the memory of which was kept alive in the City of Ramoth. In addition to this, the Eastern portion is very interesting from the New Testament point of view. We may say that Galilee is the land of the New Testament, but we must remember that on the Eastern side is the country of the Gadarenes, and so many places that are connected with the history of Our Lord, and we may say that the Map of Palestine cannot be considered perfect until at all events the Eastern shores of the Sea of Galilee have been laid down. Although we may not all have the enthusiasm of M. Ganneau, for which he has ample justification in the work he has done, we may expect that some relics of very early Ebionite Christianity may be discovered in the district of Bashan and on the Eastern shores of the Sea of Galilee and as far down as Pella.

With regard also to the recovery of monuments similar to the Moabite stone, I should like to remark that when I was in Jerusalem, in 1874, the American Consul-General there, who had recently taken a journey through Moab, informed me that he had seen inscribed stones similar to the Moabite stone among the ruins of some of the Moabite cities, so that there is a reason, at all events, to take very great care in exploration in the district surrounding Hesban.

The Dean of Westminster. After the very interesting speeches we

have heard, I am unwilling to occupy your time any longer. I have only to say that when the Palestine Exploration Fund was first set on foot by my friend Mr. Grove, though I sympathised heartily with the proposal, I felt what Mr. Freshfield has expressed as his feeling also, that the point at which every effort ought to be directed, was the exploration of Eastern Palestine. Beautiful as that map of Western Palestine is, and great as has been the light which has been cast by the explorations, that light is as nothing compared with the light that can be thrown upon the eastern district of Palestine. Of all the features of interest that struck me when I first went to Palestine—a feature altogether undescribed, and of which I had not the least idea till I went there, of which no book of travel had given the slightest information—was the constant view of the mountains of Moab, and the great wall of the east of Jordan. Wherever we went, that wall, rising up from the purple chasm which separated us from it, was a beautiful source of mystery and of tantalization, filling us with a sense of ignorance, and with a desire to know what there was beyond it. I feel pleased and delighted beyond measure that that desire is now about to be satisfied. True, there are not nearly so many interesting places; but still there are very many. Once before I mentioned a place, and I think Lieutenant Conder has mentioned it—which I would go any distance to see, and that is the Mahanaim.

I think I need hardly say anything more. Everything has been discussed from so many points of view that there is nothing further to be said. I am sure the Archbishop of York, who is recruiting his health elsewhere, will be very glad to hear of this successful meeting, and I am very glad to have been able to take his place.

There is one remark I should like to make about the photographs. All the photographs of Palestine should be invariably photographs of buildings and of ruins; photographs of landscapes appear to me always nearly worthless. I beg Lieutenant Conder if he has any influence over the photographer who is with him, to induce him to spend all his efforts upon the buildings, and none upon landscape.

The Dean then put the following resolution: "It is now desirable to take without delay the Survey of Eastern Palestine under conditions similar to those which proved to have been successful in the case of Western Palestine."

The Resolution was carried unanimously.

Mr. Maudslay. I must be excused if I ask one word, and that is how we stand with reference to the exploration of the eastern side of the Jordan with regard to the Americans, and the nature of the arrangements by which it is proposed we should carry out what they had undertaken. The public may possibly be under the impression that the Americans have surveyed the country, and I think a few words should be said in this room in explanation as to the character in which we go to the East of the Jordan. Perhaps Mr. Glaisher will clear up this point.

Mr. Glaisher. As Mr. Maudslay says, an arrangement was made that the Americans were to take the eastern side, and we the western side, but

they have not surveyed the country ; the result of their reconnaissances is in fact, this map which I hold in my hand ; and it is now distinctly understood by them that we are to take up the real survey. Colonel Warren made some reference to the money that we should want, and as I am on my feet, perhaps it would be well that I should state that we are entirely out of debt, and we have at the bankers' more than a thousand pounds. One other remark. We have heard read portions of an interesting letter of Mons. Ganneau. Though it is not quite arranged at present, we hope that Mons. Ganneau will become our monthly correspondent in Palestine ; and if he discovers anything there, we have a great hope that we shall soon know the result of his labours.

Rev. F. W. Holland. I have great pleasure in rising to propose a vote of thanks to the Dean of Westminster for kindly presiding upon this occasion, also for allowing us the use of this room. We have very often had to thank the Dean for his kind assistance at our meetings, and in other ways ; and I can only express the hope that he will feel rewarded to-day by the character of this meeting, and that we shall bring our work to a happy conclusion.

Mr. Glaisher. It is my pleasing duty to second that. Ten years ago, in this room, the Dean was here ; the Archbishop was in the chair ; and to see the Dean still taking that same lively interest in Palestine that he expressed then, is a great pleasure, and you may readily know how gratified I feel at performing the duty of seconding this motion.

The Dean of Westminster. I accept your resolution with thanks, and re-echo your wish for the success of the undertaking.

The following is the Pamphlet referred to by Mr. Glaisher (p. 6). It is the Prospectus of the—

NEW SURVEY OF EASTERN PALESTINE.

The following objects were proposed in the original prospectus of the Palestine Exploration Fund, issued in 1865 :—

"1. *Archæology.*—To search *below the surface* in Jerusalem ; to examine the mounds and ruins which lie scattered over the whole country, and to gather from them the buried secrets which may help us better to understand the Sacred History.

"2. *Topography.*—To complete the survey of Palestine, of which the coast-line is already accurately mapped in the Admiralty charts.

"3. *Geology.*—Of which we still remain in comparative ignorance.

"4. *Natural Sciences.—Botany, Zoology, Meteorology.*—These are at present but very imperfectly known, while the recent investigations of Mr. Tristram, limited as they necessarily were, show that researches are likely to furnish results of no common scientific interest.

"5. *Manners and Customs.*—To do for the Holy Land what Mr. Lane's 'Modern Egyptians' has done for Egypt—describe in a systematic and exhaustive order, with clear and exact minuteness, the manners, habits, rites, and language of the present inhabitants, with engravings intended, like his, 'not to embellish the pages, but to explain the text.'"

Survey of Western Palestine.

On the conclusion of their excavations at Jerusalem, in the year 1870, the Committee undertook the Survey of Western Palestine, a great work in which they have been occupied without interruption for nine years.

This part of the Survey is now happily completed and the Great Map in 26 sheets is already in the hands of subscribers, while the volumes of the memoirs and the reduced maps are well advanced and will very shortly be issued.

The Memoirs

These memoirs, as has been already set forth in the *Quarterly Statement*, comprise not only a detailed description of the country, with its ruins, villages, mountains, streams, etc., by the officers in charge of the Expedition; but also separate papers and essays by Colonels Wilson and Warren, Canon Tristram, Mr. Glaisher, Prof. Palmer, Mr. Trelawney Saunders, and others. One of the three reduced maps will show the position of the places mentioned in the Old Testament; the second will give those of the New, the third will be a modern map.

The Reduced Maps.

The Great M

The large scale map is generally acknowledged to be the greatest contribution rendered to the study of the Bible since its translation into English: while the accuracy of the information obtained and the short space of time taken to complete and produce it compare favourably with any Government survey. The value of the work is highly appreciated by foreign as well as by English scholars; one of the most venerable of English theologians writes to say that he thanks GOD that he has lived to see it completed.

This map contains the whole of Western Palestine, having for its eastern boundary the River Jordan and the Dead Sea.

But Eastern Palestine has yet to be surveyed.

Eastern Palestine.

The present condition of our knowledge of this great district resembles very much that of Western Palestine when the Survey was first com-

menced. The country has been visited by many travellers, who have described its general features and many of its ruined cities. Among these travellers may be mentioned Burckhardt, Seetzen, Wetzstein, Irby and Mangles, Lord Lindsay, De Vogüé, Waddington, De Luynes, Porter, Costigan, Lynch, Molyneux, Robinson, Cyril Graham, Thomson, Tipping, Tristram, MacGregor, Eaton, Zeller, Wilson and Anderson, Warren, Burton, Drake, Palmer, Socin, Steever, Merrill, Klein, Freshfield and Oliphant.

Our own expeditions under Lieut. Warren and those of the American Exploration Society east of Jordan have made reconnaissances which will facilitate the work now proposed.

The country to be surveyed comprises the following districts or provinces :—

I. Bashan, the "level" land, which extends from the southern slopes of Mount Hermon to Gilead on the south, the southern frontier being the River Hieromax, now called the Nahr Yarmûk or the Sherîat el Mandhûr. Bashan is subdivided into :—

a. Jetur (Ituræa), now called Jedur, of which Philip was tetrarch (Luke iii, 1) named after Jetur, the son of Ishmael (Gen. xxv, 15, 16). It was conquered by the Manassites (1 Chron. v, 18–23), who lived there until the Captivity. This country contains the southern and eastern slopes of Hermon and the table-land eastward.

b. The district named after the city of Golan (Gaulanitis) now called Jalân. This is a table-land rising by terraces from the Jordan Valley. The city (Josh. xx, 8), which gave a name to the district, has yet to be identified. Dr. Porter says that there are a hundred and twenty-seven ruined towns in it, among them the ancient towns of Aphek, Gergesa, Bethsaida, Hippos, Gamala and Ashtaroth.

c. The Hauran (Auranitis), a level land, with the ruins of 150 towns, the buildings of which are still remaining in good preservation, many of them with roofs, doors, and window shutters, all of stone and still in their places. A vast number of Greek and Roman inscriptions have been collected in this district. Those found by MM. de Vogüé and Waddington have been published in de Vogüé's magnificent work on the architecture and archæology of Central Syria.

d. The Argob or Trachonitis, now called el Lejah, the "place of refuge," which is, correctly, a part of the Hauran. This formed part of

the kingdom of Og (Deut. iii, 4, 5), when it held threescore cities "fenced with high walls." Remains of more than sixty cities have been found here, but it has been but little visited of late, and never completely explored.

e. East of the Hauran is the district of Batanæa containing the Hill of Bashan. This country is that of the Maachathites (Deut. iii, 14; Josh. xii, 5; 2 Sam. x, 6; 1 Chron. xix, 7).

II. The land of Gilead, including territory allotted to the tribes of Reuben, Gad, and part of Manasseh, extending southwards as far as the river Arnon. Of this country Canon Tristram writes ("Bible Places," p. 322)— Land of Gil

"The name of Gilead is still preserved in Jebel Jilad, little south of the Jabbok, one of the highest points of the mountain range which rises near 4,000 feet from the Valley of the Jordan beneath it. In all Gilead, whether forest, prairie, or valley, there is a wild grandeur, unequalled in any other part of Palestine. Rising abruptly from the Jordan Valley, its western bluffs are deeply furrowed by the many streams which drain the mountain sides.

"The traveller rides up and down deep concealed glens: sometimes by a track meandering along the banks of a brook, with a dense fringe of oleanders, 'willows by the water-courses,' shading it from the sun and preventing summer evaporation, while they waste their perfume on the desert air without a human inhabitant near. Lovely knolls and dells open out at every turn, gently rising to the wooded plateau above. Then we rise to higher ground and ride through noble forests of oak. Then for a mile or two through luxuriant green corn, or perhaps through a rich forest of scattered olive-trees, left untended and uncared for, with perhaps patches of corn in the open glades.

"No one can fairly judge of Israel's heritage who has not seen the luxuriant exuberance of Gilead, as well as the hard rocks of Judæa, which only yield *their* abundance to reward constant toil and care. To compare the two is to contrast nakedness and luxuriance. Yet the present state of Gilead is just what Western Palestine was in the days of Abraham. Subsequently the Canaanites must have extensively cleared it, even before the conquest, and while the slopes and terraces were clad with olive-groves, the amount of rainfall was not affected. The terraces have crumbled away; wars and neglect have destroyed the groves, until it would be difficult to find any two neighbouring districts more strangely contrasted than the east and west of Jordan. But this is simply caused by the greater amount of rainfall on the east side, attracted by the forests, which have perished off the opposite hills. The area of drainage is about the same on each side. The ravines and wadys are numerous; but few of the streams are perennial on the west—*all* are so on the east. Every stream draining from Moab and Gilead is filled with fishes and fresh-water shells. I never found living fresh-water shells but in two streams on the west side."

III. Moab, whose principal cities are Dibon (where the Moabite stone was found), Rabbath Moab, and Kir Haraseth.

"The whole of the country is a table-land, with the ridge nearly 3,000 feet above the sea, and therefore more than 4,000 above the Dead Sea, from which it rises precipitously by a series of terraces so narrow and broken that passage is impossible; and then from the crest, scarcely more than from two to four miles retired from the sea, it gently slopes into the vast Belka, or "plain country," and the boundless wilderness beyond. It is deeply ploughed and seamed to its very centre by the stupendous ravines of the *Callirrhoe* (Zerka Ma'in) and the *Arnon* (Mojib), besides minor wadys."—Tristram's "Bible Places," p. 345.

of the

The survey of this country will be conducted on the same system as that of Western Palestine; that is to say, the officer in command will be instructed:—

1. To produce an accurate map on a scale of one inch to a mile.
2. To draw special plans of important localities, and ruined cities.
3. To make drawings or take photographs of buildings, sites, tombs, etc.
4. To collect all the names to be found.
5. To collect geological specimens, antiquities, etc.
6. To make casts, squeezes, photographs, and copies of inscriptions.
7. To collect legends, traditions, and folk-lore.
8. To observe and record manners and customs.
9. To excavate if time and opportunity permit.

Where assistance is required in any of the above divisions it will be given, as in the "Survey of Western Palestine," by gentlemen who have made those subjects their special study.

associa-

The following are some of the Biblical events connected with this part of the country:—

The battles of the "four kings against five" (Gen. xiv, 1–12); the destruction of the Cities of the Plain; the meeting of Jacob and Laban; that of Jacob and Esau; Jacob's vision at Mahanaim; the wrestling at Penuel; the conquest of Sihon by Moses; the battle of Edrei; the "Pisgah View;" the death and burial of Moses; the story of Balak and Balaam; the division of the land among the two and a-half tribes; the establishment of the three Levitical cities; the wars of the Manassites and Gadites with the Hagarites; the pursuit of Gideon; the revolt and victories of Jephthah; the wars of David against Ammon; the flight of Saul's sons, and that of David; the campaigns of Ahab and his son Joram with their allies, Jehoshaphat and Ahaziah; the wars with Moab; the birth of Elijah; the invasion of Tiglath Pilezar and of Hazael, and the captivity of the tribes.

Here is the River Arnon, the boundary between Moab and the Amorites, on whose banks stood Aroer, and the mysterious city "in the midst of the river." Here are Heshbon the capital of Sihon not far from Jahaz, where that king met with his overthrow; Rabbath Ammon, the one city belonging to the Ammonites, besieged by Joab, and taken by David; Ramoth Gilead, which played so great a part in the wars between the Syrians and the kingdom of Judah; Gadara, whose modern inhabitants, like the demoniacs of the miracle which associates the city with the New Testament, dwell in the ancient tombs; Bethsaida Julias, the scene of the miracle of Mark vi, 31–53; Cæsarea Philippi, the northernmost point of our Lord's wanderings, where Herod built his temple of white marble; Damascus, with the rivers Pharphar and Abana; the Bozrah of Jerem. xlviii, 24; the river Jabbok, where Esau and Jacob met, the boundary of the Ammonites; Machærus, where John the Baptist was beheaded; Callirrhoe, whither Herod the Great repaired in hopes of recovery from his disease. On this side are also the great palace of Hyrcanus (Arakel Emir); the unfinished palace of Chosroes the Second (Mashîta); the fortress of Kerak, where Mesha sacrificed his son; and Dibon where the Moabite stone was found. We must not forget, also, that it was on this side that the Christian Church found a refuge during the troubled times of the siege by Titus.

Comparative Maps.

The Committee invite a comparison of the three following maps. The first shows a piece of Western Palestine before the survey; the second, the same piece after the survey; the third, a piece of Eastern Palestine as it can now be mapped. The last mentioned portion selected for illustration is not exceptionally unknown; it is a piece of the country adjoining the Sea of Galilee.

The following are the places mentioned in the Bible east of Jordan most of which require to be identified :—

Abana river.
Abarim.
Abel Ceramim.
Abel Mizraim.
Abel Shittim.
Almon Diblathaim.
Aphek.
Ar Moab.
Arnon river.
Aroer.
Ashtaroth.
Ashtaroth Karnaim.
Ataroth.
Avith.
Baal Meon.
Baalgad.
Bajith.
Bascama.
Beon.
Beth Baal Meon.
Beth Diblathaim.
Beth Gamul.
Beth Haran.
Beth Jeshimoth.
Beth Nimrah.
Beth Rehob.
Bezer in the Wilderness.
Betonim.
Bosor.
Bozrah.
Bozrah of Edom.
Camon.
Casphon.
Damascus.
Dametha.
Dibon.
Dimon.
Edrei.
Elealah.
En Eglaim.
Gadara.

Galeed.
Geshur.
Golan.
Ham.
Hazar Hatticon.
Heshbon.
Hobah.
Horonaim.
Iim.
Ishtol.
Jabbok river.
Jabesh Gilead.
Jahaz.
Jazer.
Jegar-sahadutha.
Karkor.
Kedemoth.
Kenath Nobah.
Kir of Moab.
Kiriathaim.
Lasha.
Luhith.
Maachah.
Madmen.
Mahanaim.
Maked.
Maon.
Medeba.
Mephaath.
Minnith.
Misgab.
Mizpeh Gilead.
Mizpeh Moab.
Nebo.
Nimrim.
Nobah.
Penuel.
Peor.
Pharphar, R.
Pisgah.
Rabbah.
Rabbath Ammon.
Ramath Mizpeh.
Ramoth Gilead.
Rebol.
Rogelim.
Salcah.
Shibmah.
Shittim.
Shophan.
Succoth.
Tabbath.
Taphon.
Tob.
Tophel.
Zareth Shahar.
Zered Brook.
Zoar.

The following are the principal classical and mediæval sites of the country :—

Abila.
Adraa.
Aphnith.
Areopolis.
Arbela.
Batanea.
Bethezoba.
Callirrhoe.
Canatha.
Capitolias.
Dionisia.
Dios.
Dosos.
Essa.
Gamala.
Gerasa.
Hippos.
Julias.
Kerak.
Livias.
Machærus.
Neapolis.
Neballo.
Neve.
Omba.
Pella.
Phaenos.
Phenutus.
Phiala (Lake).
Philadelphia.
Philippopolis.
Regueb.
Rhose.
Rudda.
Saccæa.
Samachu.
Sebe.
Seleucia.
Soganna.
Solyma.
Tyrus.
Zara.
Zerka.

As regards the cost, it will probably be at the same rate as that of the previous survey ; that is to say, the Committee will have to meet an expenditure of over £3,000 a-year. The east of the Jordan will be surveyed at a greater speed, owing to the more favourable configuration of the country, than was possible to the west. The Committee confidently expect that the same support which was given before will be given again, because it is not to be believed that the English-speaking people will rest content while the Holy Land is only half surveyed.

ations at
e of
.

The Surveyors of Eastern Palestine will also be instructed to conduct these excavations on the shores of the Sea of Galilee which were proposed in the *Quarterly Statement* for October, 1878. The subscriptions which were paid in for the purpose of carrying out the excavations were placed on Deposit account as a special fund. It is hoped that excavations will definitively decide for us the positions of Capernaum, Chorazin, Bethsaida,

and Tarichææ. Other questions of interest are connected with Ain-el-Tabigah, the mounds of Genessareth, Irbid, Kerak, Kalat-et-Hasn, the ruins at Khersa, and other mounds and remains on the borders of the lake.

As heretofore, the reports and letters of the officer commanding the expedition will be published in the *Quarterly Statement* of the Society, which will be sent post-free to all subscribers. Quarterly Statement.

Subscriptions and donations are received by the Society's Bankers, Coutts and Co., Strand, or the Union Bank of London, Charing Cross Branch. If sent to the Offices of the Fund they should be *made payable to the order of the Secretary, and crossed Coutts and Co.*

By Order of the Committee,

1, Adam Street, Adelphi
December, 1880.

WALTER BESANT, M.A.,
Secretary.

ON SOME OF THE

GAINS TO BIBLICAL ARCHÆOLOGY

DUE TO THE NEW SURVEY.

THE Survey Map of Palestine, west of Jordan, is now given to the public. Extending over 6,000 square miles, from Dan to Beersheba, its execution in the field occupied a period of seven years, and more than two years were subsequently spent in preparing the results for publication. The voluminous memoirs which will elucidate the map, and probably fill eight quarto volumes profusely illustrated, are already in the press, and the first instalment will soon be ready for publication.

It is therefore a fitting time for the enquiry, what permanent results of value and of interest to readers of the Bible have been gained by the successful accomplishment of this arduous task?

Geographical discoveries of remarkable interest and value are at once recognised by those who compare the Survey Map with former maps of Palestine. The Sea of Galilee proves to have a depression nearly 100 feet greater than was formerly supposed. The courses of the main affluents of Jordan on the west are entirely different from those previously shown. The Crocodile River springs from a source formerly unsuspected. Villages have been transposed from one side to the other of great boundary valleys, forty fords of Jordan are now known where only four were previously marked. Ten thousand modern names occur on the map, of which nearly nine-tenths were previously unknown. Important notes as to the geological structure of the country, its physical features, cultivation, soil, climate, and natural products have been collected, and the traditions and customs of its inhabitants have been noted. And from an archæological point of view our information as to the dates, the positions, and the nature of the existing ruins, as to the character of the peasant language, and as to the manners, customs, and superstitions of the rustic population, has been enormously increased.

As early as the year 1849 the late Canon Williams had pointed out the desirability of making a complete survey of Palestine. It was felt that by this process alone could we hope to obtain an exhaustive acquaintance with the topography of the country, and ensure the examination of those districts which, lying remote from the main lines of travel, remained almost a blank on even the best maps.

The expectations thus expressed have been abundantly justified by the results of the survey, while errors of former travellers have been corrected by the survey officers. The most important discoveries have been made principally in those districts which were previously almost unknown,

and the close nature of the survey has been such as to justify the hope that but little of permanent interest has been left unexamined above the surface.

The amount of new discovery in the single branch of identification may be judged by the attached index of names which Lieutenant Conder, R.E., has at various times proposed for identification, and which are now incorporated in the Memoirs. Roughly speaking, a proportion of two-thirds of the Biblical topography of Western Palestine has now been recovered with some approach to certitude, and of this proportion no less than a third is the direct result of the survey work.

The value of geographical discovery for the verification of the accuracy of scriptural history has lately been exemplified in a striking manner in the case of the Egyptian Records relating to the Hittites. The veracity of the Old Testament account of the Hittite Princes contemporary with Solomon had been deemed as presenting insuperable difficulties, but the indisputable testimony of the granite records of Thothmes and Rameses has left no doubt as to the contemporary rule of this powerful race in Northern Syria in the times of the Hebrew Judges and Kings. The subject of identification even in the case of obscure sites, or insignificant ruins, obtains, when viewed as part of a systematic study of scriptural topography, an extraordinary value and importance. Few may care to know, for instance, the exact site of Anaharath or Zaanannim, but many will be interested in the determination of the tribe boundaries, in the elucidation of the adventures of David, or of the tragic fate of Sisera, and it is only by a patient devotion to the study of minute details of topography that any striking general conclusions can safely be reached.

That the topography of the Talmud, of the works of Josephus, of the Byzantine pilgrims, and early Christian Fathers, of the crusading and Arab chroniclers, of the Samaritan, and the Egyptian or Assyrian records, have been elucidated in an important degree by the survey discoveries will be a matter more interesting, perhaps, to the antiquarian than to the general reader ; yet each and all of these various records of the history and geography of the Holy Land are so bound up with the questions of Biblical history and geography, as to render it imperative that they should be exhaustively examined by any explorer anxious to arrive at sound conclusions as to Bible sites. The fruits of such research will find a place in the survey memoirs, and the present paper is only intended as a sketch of the most interesting results of direct Biblical importance which have been founded upon these extended inquiries.

There is another peculiarity with regard to Biblical geography which lends additional interest and importance to the subject. Palestine is a little country, the length of which might be traversed by rail in six hours and its breadth in less than two. The six hundred Bible sites which are to be found within its limits are thus on an average to be sought within an area of 10 square miles a piece. When David fled farthest from Saul he was yet not more than 40 miles from Bethlehem, nor more than 50 from

Gibeah where Saul abode. Most of the famous deeds of Samson took place in a district containing an area of less than 40 square miles. Jerusalem itself covered at the height of its prosperity not more than 330 acres, including 30 acres of the Temple enclosure. The closeness of the topography while on the one hand rendering its recovery more difficult, lends on the other a wonderful vividness and reality to the ancient episodes of Hebrew history. At Hebron we may almost trace each step of Abner's way from the Well of Sirah to his doom at the city gate. By Michmash we may gaze on the very rock up which Jonathan climbed. At Shechem we may stand on the brink of Jacob's well, in the very foot prints of Christ. We are not content to know that Capernaum was north of Tiberias, and insist on fixing the exact spot now disputed by sites only about 2½ miles distant one from the other. Fierce controversies arise between those who place Cana 4 miles north of the traditional site and those who support the latter view. Topography, in short, takes the place in Palestine of geography, and for this reason a plan rather than a map is required.

Of the character of the proposed identifications, their reasons, and comparative probability, the Appendix will give the reader some idea. It is proposed here briefly to run over the most interesting questions on which the trigonometrical survey has thrown new light, and for this purpose it will be most convenient to follow the sequence of the Scripture narrative rather than to adopt any geographical arrangement, especially as the episodes of Bible history are as a rule each confined to some well marked district of the Holy Land.

Commencing, then, with the immigration of Abraham from beyond Euphrates, the first topographical question which arises is that of the exact position of the Royal Canaanite city of Ai. (Sheet XVII.)

The situation of this ancient town, afterwards entirely destroyed by Joshua, is minutely described in the Bible. It was "beside" Bethel (Joshua xii, 9), and the Hebrew has here the force of "close to," which appears fatal to the claims of various sites south and east of Michmash (or more than 6 miles from Bethel) which have been proposed. Ai lay also east of Bethel (Joshua viii, 9) with a ravine to the north (verse 11) and a desert to the east (verse 15), while to the west was a place fitted for the ambush which the Israelites set. These indications were so definite that but little doubt could exist as to the approximate situation of the town. Travellers visited and described a ruin called *et Tell*, "the mound," which seems first to have been pointed out by Vandevelde, and the somewhat fanciful conjecture was advanced that this place derived its name from the fact that Joshua made of Ai "a heap (*Tell* in the Hebrew) for ever." (Joshua viii, 28.)

To this view there were, however, objections. There is no certain indication that the hillock of *et Tell* was ever the site of a city, and the expression "for ever" should be taken rather as an indication of the early date of the Book of Joshua, for Ai reappears as a town in the later Jewish Books. (Nehemiah xi. 31 ; Isaiah x, 28.) Fortunately the survey party were able to suggest a better explanation through the discovery of the

ancient ruins of *Haiyân* immediately south of *et Tell*. The name recalls the Aina of Josephus (equivalent to Ai, Ant. v. i, 9) and the existence of large rock-hewn reservoirs with tombs and cisterns proves the site to be of importance and antiquity. To the north is a rugged ravine, to the east the desolate desert of Bethaven. To the west is Bethel, 2 miles distant, and between the two sites is the open ravine called "the valley of the city," where unseen, yet close at hand, the ambush may have lain concealed beneath the low cliffs or among the olive groves after creeping across from the northern valley behind the rough rocky swell which runs out to the mound of *et Tell*.

It was from the flat ridge which rises between Bethel and Ai that Abraham and Lot looked down on the Cities of the Plain and on the "circle" of Jordan, and the view from this point over the desert ranges and the Jordan valley to Nebo and Moab is still striking and picturesque.

As regards the position of these famous cities which Josephus believed to have lain beneath the waters of the Dead Sea, but which modern students place in the Jericho Plain or in the corresponding basin (Ghôr es Seisebân) east of Jordan, the survey results were rather of negative than of positive value. A very close and careful examination of the ground showed that no traces of the sites of any towns occur between Jericho and the Dead Sea shore, the remaining ruins belonging only to mediæval monastic establishments, and that no springs suitable for the supply of even small villages exist, or probably ever existed, in this district. Thus, although an apparently successful attempt has been made by Dr. Selah Merrill to recover the site of Zoar, our information as to the other four cities the destruction of which is described in the Book of Genesis (chapter xix) remains indecisive. Lieutenant Conder has, however, pointed out that the term "plain" (*Ciccar*) is applied in the Bible to the Jordan valley as far north as Succoth, which renders it not improbable that Admah, one of the lost cities, is identical with Adam, a city of Jordan (Joshua iii, 11), the name of which still survives at the *Damieh* ford east of Shechem. (Sheet XV.)

Among the nations inhabiting Palestine in the time of Abraham the Kenites—a tribe as yet unidentified—are mentioned (Gen. xv, 19). They inhabited a strong fortress in the southern part of the country and survived until the time of David. Lieutenant Conder proposes to identify this site with the town of Cain which Vandevelde found in the present ruin of *Yekîn*. This affords an interesting illustration of the Old Testament narrative. Yekîn perched on the edge of a steep cliff dominating the desert plateau west of the Dead Sea, is one of the most conspicuous objects against the sky-line looking from the east. To Balaam, on the summit of Nebo, it was in full view, and the words of his prophecy thus receive fresh force and significance, "strong is thy dwelling place, and thou puttest thy nest in a rock." (Sheet XXI.)

The history of the late Patriarchs Isaac, Jacob, and his sons is mainly connected with the district called *Negeb* or "Dry" in the Bible Beersheba, Gerar, Rehoboth, and the unknown sites of Esek and Sitna, are all to be found in this part of the country. The reason of this choice

of country is plainly shown by the survey. The high hills of Hebron, with their steep, rocky valleys, rich soil, and numerous springs, are suitable for agriculture and the growth of the olive and the vine ; the low chalky hills and the healthy Beersheba plateau form a pastoral district still capable of supporting large flocks and herds. The Hittite mountains round Kirjath Arba (or Hebron) were already inhabited by an agricultural population in the time of Abraham, and the nomadic Hebrews found a suitable home in the pasture lands of the Philistines and Amalekites in the "dry district," of which the distinctive character remains unchanged. Where the Patriarchs once spread their tents the great tribes of the Azazimeh and Henâjereh now pasture their flocks ; and in the mountains of the sons of Heth the modern Fellahin lead an agricultural life.

The site of Gerar was discovered before the survey, but was visited by the party from Gaza. There is little to describe beyond a gigantic mound on the side of a deep broad watercourse in the midst of rolling plains.

The question of most interest was that of rediscovering the wells which Isaac dug again in the valley of Gerar after those made by Abraham had been filled in by the Philistines. (Gen. xxv, 18.) No great masonry wells such as those of Beersheba were discovered ; and, indeed, at Beersheba itself the survey party were able to show that the masonry once thought to have been the work of Abraham dates only from Arab times. It was ascertained, however, that a strong underground stream flows down the great valley which, rising near Hebron, runs southwards to Beersheba, and thence westwards to the sea, passing by the site of Gerar. The Arabs camping round this latter site are in the habit of making excavations in the bed of the valley, from which the water wells up, and which are called by the Hebrew name *Hufr*, or "pit." If the wells dug by Abraham were of this description they might easily have been filled in by the Philistines and reopened by Isaac ; while the loss of the sites of Esek and Sitnah is on the same supposition naturally explained.

The later books of the Pentateuch contain but little information concerning the topography of Palestine proper. A few notes of interest may, however, be here given in connection with the survey.

According to the Law of Moses the scapegoat was set free in the wilderness (Levit. xvi, 9), but at a later period an evasion or modification of this command was introduced by the Jews ; the goat was conducted to a mountain named Tzuk situated at a distance of ten sabbath days' journey, or about $6\frac{1}{2}$ English miles from Jerusalem. At this place the Judæan desert was supposed to commence, and the man in whose charge the goat was sent out, while setting him free, was instructed to push the unhappy beast down the slope of the mountain side, which was so steep as to ensure the death of the goat, whose bones were broken by the fall. The reason of this barbarous custom was that on one occasion the scapegoat returned to Jerusalem after being set free, which was considered such an evil omen that its recurrence was prevented for the future by the death of the goat, as described in the tract Yoma of the Mishna.

The distance given between Tzuk and Jerusalem seems to indicate a

lofty hill top now called *el Muntâr*, "the watch-tower," which dominates the desert west of Jericho. An ancient road leads from Jerusalem to this point, and beside the road is an ancient well preserving the name Tzuk in the Arab form *Sûk*. The eastern slope of the hill is steep, and falls unbroken to the stony valley beneath. The goat, dashed on the rocks, in its fall must inevitably have been destroyed, while the mountain may well claim to be considered the entrance to the dreary desert which stretches beneath its summit. (Sheet XVIII.)

Another discovery of some interest was the identification by the survey party of one of the species of deer mentioned in the Pentateuch. In the English version the Hebrew word *Yakhmor* is rendered "fallow deer," but this interpretation has not been accepted by modern scholars. It now proves that the roebuck as well as the fallow deer is to be found in the Carmel thickets, and it has been ascertained that the old Hebrew name *Yakhmor* is still applied by the natives to the former species—the English roebuck.

The researches of Egyptologists have thrown considerable light on the condition of Palestine and Syria during the time of the Hebrew bondage in Egypt and during the time of the Judges. The records of the great conquerors Thothmes III and Rameses II give long lists of places situated in the Holy Land and in the country of the Hittites. The reason why the children of Israel entered Palestine from the east after their long sojourn in the Sinaitic desert appears to have been that the Egyptian Government was then firmly established in the Plain of Sharon. This agrees with the Bible account of the Philistine immigration into the southern plains from Egypt, and in this, as in so many other instances, the records of the Egyptian monuments fully coincide with the history of the Old Testament.

Attempts have been made by Mariette, Brugsch, Rougé, Chabas, and other Egyptologists to identify the towns mentioned in the records of Egyptian conquests in Palestine. Many have been recovered with certainty, but it was not until the survey had been completed that it became possible to study the subject exhaustively. Many existing ancient sites not mentioned in the Bible are found to agree exactly with the Egyptian lists, and the probable correctness of the identifications thus obtained is evinced by the ease with which the lists are shown to preserve a proper consecutive order, while the districts occur along the very line of march which we know, from other inscriptions, to have been followed by Thothmes and Rameses. The number of identifications proposed within the country covered by the survey may also be contrasted with our almost entire ignorance of the topography of the Hittite towns lying north of Damascus, of which scarcely six are known out of a total of over 100 noticed on the monuments.

The Book of Joshua is the central focus of Biblical topography, and the elucidation of this Book has been materially advanced by the survey. Several important cities before unknown have now been fixed with considerable certitude, and the boundaries of the tribes have been traced in a satisfactory manner.

The survey officers were able to confirm entirely the discoveries of M. Clermont Ganneau respecting the sites of Adullam and Gezer, and to these important towns they add the identification of Hazor and Debir, with a large number of less famous names. The site of Gilgal, discovered east of Jericho by the German traveller Herr Schokke, was fixed by the surveyors, who found the name *Jiljûlieh* still surviving. The site of Makkedah fixed by Colonel Warren, R.E., at the present village *el Mughâr*, "the caves," has been adopted by the surveyors, who found that at this site only of all the possible sites for Makkedah in the Philistine plain do caves (*see* Joshua x, 22) still exist. The position also agrees well with the identification of the towns Gederoth, Beth-Dagon, and Naamah mentioned in the same group with Makkedah. (Sheet XVI.)

The site of Joshua's tomb has long been sought, the identification with the rock sepulchre at *Tibneh*, north-east of Lydda, being unsatisfactory for several reasons. Joshua was buried at a place called Timnath Heres, in Mount Ephraim, and there is a remarkable consent of Jewish, Samaritan, and Christian tradition, traceable from the fourth century downwards, which points to a village called *Kefr Hâris*, south of Shechem, as representing the burial place of Joshua. Lieutenant Conder ascertained that this tradition is still extant among the Samaritans, and although it appears little understood by the peasantry, a sacred shrine exists outside the village of Kefr Hâris to which the name *Neby Lush'a* (no doubt a corruption of Yehusha, or Joshua), is applied. Ancient tradition also places the tomb of Nun at this same village, and a second sacred place called Neby Nûn was found close to the supposed site of the tomb of Joshua.

The Priests Eleazar and Phinehas, the successors of Aaron, were also buried in Mount Ephraim. The traditional site was sought in vain by the great American explorer Robinson, but the surveyors were more fortunate, and have visited and minutely described the tombs which according to Jewish, Samaritan, and Christian tradition alike, are said to be those of the sons of Aaron. The monument of Phinehas appears to be of great antiquity, but that of Eleazar has been rebuilt. They are both close to the village of Awertah, which the Samaritans identify with the Biblical Gibeah Phinehas. (Joshua xxiv, 33.) (Sheets XIV and XI.)

There is no room in a paper like the present to go very deeply into the question of the boundaries of the tribes. Several important survey discoveries have been cordially accepted by students of the subject, and several very important modifications have resulted from the survey in the lines of the borders as formerly laid down. The general results of the new investigation appear to be as follows :—

1st. The boundaries are shown to be almost entirely natural – rivers, ravines, ridges, and the watershed lines of the country.

2nd. To many of the tribes were assigned distinct districts of the country. Issachar had the great plain, Zebulon the low hills north of it. The sons of Joseph held the wild central mountains, and Naphtali those of Upper Galilee. Dan and Asher occupied the rich Shephelah (or lowland) and maritime plain. Simeon inhabited the desert, while Judah, holding the

largest share of territory, had both mountain and Shephelah plain and desert in its portion.

3rd. The enumeration of towns follows always an order roughly consecutive, and all those of one district are mentioned together.

4th. The proportion of territory to population is calculated to vary exactly in accordance with the fertility of the district. Taking as a basis the tribe populations (Numbers xxvi), it appears that the ancient populations must have been most dense exactly in those districts in which the greatest number of ancient ruins is now found, and which are still most thickly inhabited.

Among the most important discoveries concerning the tribe boundaries are the following : the waters of Nephtoah (Joshua xv, 9) are now placed at the pools of Solomon (so called), besides which the spring *'Atân*, the Talmudic Etam, or Nephtoah, still exists. Formerly they were identified with the spring near Lifta west of Jerusalem, probably Eleph of Benjamin ; but this theory renders the topography very confused, whereas the new proposal when joined to the new identification of Kirjath Jearim makes the boundary line of Judah follow a natural watershed.

On the north-west border of Benjamin, Aarotth Adar (*ed Dârieh*), and Archi (*'Ain Arîk*) have been recovered in exact accordance with the words of the Bible (Joshua xviii, 13), which define the position of the former with the greatest minuteness. The course of the brook Kanah, (Wâdy Kânah) has now for the first time been correctly laid down, thus fixing the boundaries of Ephraim and Manasseh ; and the discovery of Rabbith and other sites has for the first time defined the border of Issachar. Many new identifications are proposed for the towns of Dan and Asher, and a group of places belonging to Naphtali has been fixed in an apparently satisfactory manner in the plateau immediately west of the Sea of Galilee.

Let us now pass to the elucidation which has been effected, through the survey, of the episodical histories of the Book of Judges,—the adventures of Caleb, Sisera, Gideon, and Samson.

The site of the city Debir, for the conquest of which the valiant Othniel was rewarded by the hand of Achsah, Caleb's daughter, had long been sought in vain. Many towns of the group surrounding it had been identified. It was known to stand in the Negeb, or "dry," country south of Hebron, and that certain springs should be found not far off. The name signifies "back," suggesting that the city stood on a ridge, and Lieutenant Conder was the first to point out the probable identity with the ancient village *Dhâherîyeh* ("of the back"), standing in a conspicuous position among ancient tombs and quarries close to the other towns of the group, while, at a short distance to the north, a valley was discovered full of springs, some on the hill side, some in the bed of the ravine, answering in a most satisfactory manner to the "upper and lower springs" for which Achsah besought her father. (Judges i, 15.) (Sheet XXV.)

The topography of the Scriptural episode of the defeat and death of isera has been as yet very little understood. The scene of the battle has

often been placed on the south-west of the great Esdraelon plain, and the defeated general has been supposed to have fled a distance of 35 miles over the high mountains of Upper Galilee. The scene may, however, be now confined to a very small area (*see* Judges iv).

The forces of the Hebrews under Barak were assembled on the slopes of Mount Tabor, and the conflict took place on the plain south-west of the mountain near Endor. (Psalm lxxxiii, 10.) The pursuit of the main body was westwards towards Kishon, and as far as Harosheth (el Harithîyeh) evidently through the plains, because chariots are mentioned. Thus the battle was almost exactly identical in locality with the famous battle of Tabor, in which Kleber repulsed the Turks, driving them into the treacherous quagmires, which now, as in 1799, or as in the time of Sisera, nearly 24 centuries earlier, fringe the course of the apparently insignificant stream of Kishon. (Sheets VI and VIII.)

The flight of Sisera himself took an opposite direction to the plain of Zaanaim. The Jewish commentators have made it clear that this name should be translated not "by Zaanaim" but Bitzaanaim, "the marshes," and the occurrence of the same name in a group of towns west of the Sea of Galilee seems to show pretty conclusively that the neighbourhood of *Bessûm*, with its marshy springs east of Tabor, is intended. The Kedesh of the passage is probably a site so called south of Tiberias, and the tent of Heber the Kenite would thus have been spread on the open plateau within 10 miles of the site of the battle.

Among the graphic episodes of Hebrew history there is, perhaps, none more picturesque than that relating to Gideon's victory over the Midianites. The general scene is known, the Valley of Jezreel, now Wâdy Jâlûd; but the details of the minute topography are still obscured through the loss of many sites east of Jordan. Beth-Shittah, Zererath, and Tabbath, Beth-barah, Penuel, Nobah, Jogbehah, and Karkor (Judges vii, 22; viii, 11) are still unknown, and it is only possible to say that the pursuit extended from some point below Jezreel to the mountains east of Jericho.

The survey throws light on the position of Abel Meholah, and Succoth is identified at Tell Der'ala. Suggestions may also be offered for the situation of the famous "Spring of Trembling" (En Harod), where Gideon selected his band, and light may be thrown on the curious notice of a Mount Gilead, west of Jordan, in the same connection.

It is clear from the account given by Josephus that Harod is to be sought not far from Jordan, and Lieutenant Conder has suggested that the name 'Ain el Jem'aîn, "Spring of the two Companies," applying to an abundant stream at the foot of the eastern slope of Mount Gilboa, may retain a trace of the memory of Gideon's famous selection of three hundred tried men, who, as able to satisfy their thirst by water taken in the palm of the hand, were indicated as fitter to endure the trial of a long and rapid pursuit than the remaining multitude who drank more freely.

As regards the name Gilead (Judges vii, 3), it has been found that from an early period the name *Jalûd* or *Jelden* has applied to the stream flowing down the Valley of Jezreel, and it is suggested that the name Gilead,

applying according to the passage above cited to a mountain near this stream is the true Hebrew form of the modern Arab *Jalûd* and of the Jelden which is mentioned in Egyptian documents.

The history of Samson has been elucidated to a certain degree by the addition of the probable site of Etam to those already known, viz., Timnah, Sorek, Zoreah, and Eshtaol.

There were several places in the south of Palestine named Etam ("The Eagle's nest"), but that which became the hiding place of Samson is described as a "rock" or "cliff." (Judges xv, 11.) The new identification is with the village of *Beit 'Atâb*, standing on a conspicuous and rugged knoll of rock above a deep valley. Under the village is a long tunnel, to which a Hebrew name signifying "Cave of Refuge" still applies, and it is proposed to recognize in this curious cavern, close to the principal spring, the cleft (wrongly rendered "top") of the Rock Etam into which the Hebrew hero descended when hiding from his enemies. (Sheet XVII.)

The site of Ramoth Lehi still remains doubtful, but, with this exception, the scenes of Samson's life are now grouped round the vicinity of Zoreah, his native home, and at this village the site of Samson's tomb, according to mediæval Jewish tradition, has been recovered at the shrine of the Prophet Samat, to which certain confused traditions still attach, in which the principal episodes of Samson's career may be recognized.

A site long sought in connection with the history of Samson, and also with the succeeding episode of the Danite conquest of Laish, is that of the Mahaneh Dan, or "Camping place of Dan," which was "behind" (*i.e.*, west of) Kirjath Jearim (Judges xviii, 12), and near Zoreah and Eshtaol. These indications could not be reconciled with the site usually proposed for Kirjath Jearim. It appeared probable that the wide corn valley east of Samson's home was the camping ground in question, but this is eight miles from Kuriet el 'Anab, where Dr. Robinson places the famous city Kirjath Jearim, the resting place for so many years of the Ark.

It has now been pointed out that this latter identification rests on no surer basis than a fifth century tradition of foreign origin, and we are left free to seek the "Town of Thickets" elsewhere. The survey identification points to a ruin on a thickly covered ridge amongst copses and thickets, to which the name *'Erma* still applies, corresponding to the latest form Arim, which took the place of the original Ya'rim, or Jearim. (Ezra ii, 25.) This ruin is distant only three miles from the great valley towards which it looks down. It lies close to the border of the lower hills and the high Judean mountains, and it shows evidence of having been an ancient site.

Close to the same vicinity the survey party fixed the situation of Deir Aban, "The Convent of the Stone," which St. Jerome identifies with the site of Ebenezer, "The Stone of Help," a name so familiar to our ears as that of the monument raised by Samuel to commemorate the great victory over the Philistines (1 Samuel vii, 12), and probably marking the final limit of the pursuit.

The situation of the site seems to render the traditional view not im-

probably correct, for the village stands at the mouth of the great valley, down which undoubtedly the Philistine hosts were driven, and just at the border which, until the time of Solomon, appears to have divided the land of the Philistines from the territory actually occupied by the sons of Judah. (Sheet XVII.)

The history of Saul is elucidated by the survey in the recovery of Bezek, the mustering place of Israel. (1 Samuel xi, 8.) Jerome and Eusebius place this site, which is known to have been near the centre of the country, at a certain distance from Shechem on the road to Beisân. At this exact distance on the ancient road the ruin *Ibzîk* occurs on the survey, and this is a case which, if we take into consideration Mr. Grove's argument on the subject before this discovery had been made, may fairly be considered to be past dispute the recovery of a long lost site. (Sheet XII.)

The exact site of the great cliffs Seneh and Bozez, which Jonathan climbed with his armour bearer (1 Samuel xiv, 4), has been pointed out by the surveyors through the aid of a remarkably exact description by Josephus of the site of the Philistine camp. The name Seneh, "thorn bush," given at a later period to the intervening valley (as noticed by Josephus) is still recognizable in the present Arab name of the same splendid gorge *Wâdy Suweinît*, or "The Valley of the Little Thorntree." The name Bozez, or "shining," is explained by the fact that it is that of the northern cliff crowned by a mound of white chalky marl, presenting a shining and conspicuous aspect, contrasting strongly during the daytime with the dark shadow of the southern precipice.

The fixing of this famous spot depends to a certain extent on the right allocation of Gibeah (of Saul or of Benjamin), a site which Mr. Robinson transferred to the old beacon platform called Tel el Fûl. There is not here space for the arguments connected with this question, but it may be noted that the survey shows that Tell el Fûll cannot have been the site of an ancient town.

The romantic adventures of David during the time of his exile and wanderings have received much important illustration from the results of the survey. Elab, Sechu, Adullam, Gath, Hareth, Hachilab, Sela-ham-Mahlekoth, and Choresh Ziph are now pointed outwith some degree of certainty. The capital of the Cherethites (1 Samuel xxx, 14) is known and the site of Nob is fairly fixed. Visiting the ruins of the "hold" of Adullam (*'Aid-el-Ma*), first identified by M. Clermont Ganneau, the surveyors found a cave close to the ruins of the ancient town, a cave sufficiently large to have been the habitation of David while his band were garrisoning the hold or fortress. Not many miles away lies the broad corn vale where the shepherd boy slew the giant with one of the smooth pebbles which still fill the bed of the winter torrent flowing through the valley. The various hiding places to which the future King of Israel retired occur in consecutive order, each south of the other, each further from his native town, each in a country more widely desolate, more difficult of access than that surrounding the preceding strongholds. The probable site of the "Cliff of Divisions," Sela-ham-Mahlekoth, is the present

Wâdy Malâky south of Hachilah (*el Kôlah*), and close to the site of Maon (*M'ain*). Here, in full sight of the hunter, but protected by the mighty precipices of the gorge, David was rescued by the sudden Philistine invasion which compelled Saul to retreat just as the prey appeared to be within his grasp. (1 Samuel xxiii, 26.)

Among the most vexed questions of the later episode of David's flight before Adsolom was that of the site of Bahurim (2 Samuel xvi, 5), where the spies lay hid in the cistern covered by the corn. (2 Samuel xvii, 7.) It has been assumed that David's flight across Olivet was directed along the road leading by Bethany, but Bahurim belonged to Benjamin, and was identified by the Jews of the fourth century (see the Targum of Jonathan) with the later Almon, or Alemeth, lying beside the ancient road which leads across the saddle north of the principal summit of the Mount of Olives. Lieutenant Conder proposes to accept this explanation, for the site of Almon (*'Almît*) is sufficiently near to the "top of the hill" to render its identity with Bahurim possible, while the existence of numerous rock-cut cisterns with narrow mouths illustrates the incident of the concealment of Jonathan and Ahimaaz, who "came to a man's house in Bahurim which had a well in his court, whither they went down, and a woman took and spread a covering over the well's mouth and spread ground corn thereon, and the thing was not known." (Sheet XVII.)

Among the illustrations of later Jewish history springing from the survey, we may notice the discovery of winepresses at Jezreel where no vines at present exist; the probable identification of Tirzah (Teiâsîr), where the Kings of Israel were buried, and the indication of a possible site for Megiddo at the important ruin Mujedd'a. The topography of the apochryphal Book of Judith is now shown to be quite possible, and the famous city Bethulia has been located in a position answering every known requisite at the modern village of *Mithilia*. A curious but important distinction may now be made between Tipsah or Thapsacus, on Euphrates, and the Tiphsah where Menahem so cruelly avenged himself on rebellious subjects. (2 Kings xv, 16.) At a time when the King of Israel was a tributary of the Assyrian monarch it seemed highly improbable that Hebrew conquests should have extended to Euphrates, and an ancient ruin called *Tufsah* still existing south of Shechem seems more probably the site of the rebellious city, which refused to submit to the usurper Menahem after his conquest of Samaria and Tirzah. (Sheet XIV.)

The victories and defeats of Judas Maccabæus are in like manner illustrated by recent discovery. The site of the great battle in which he lost his life has been variously placed near Ashdod, and north of Jerusalem. The identification of Eleasa (Ilasa), Berea (Bîreh), Berzetho (Bîr ez Zeit), and Mount Azotus near the last, now show that the position which he occupied was originally intended to intercept the retreat of Bacchides by an advance from Modin—the native town of the Hasmoneans—on the narrow pass through which the road from Samaria to Jerusalem leads in the vicinity of 'Ain el Haramîyeh. (Sheet XVII.)

The site of the famous battle of Adasa in like manner is found at a spot where the two main lines of advance on Jerusalem from the north join one another; and the first campaign of Judas, as is now clearly evident, consisted in the defence of the three main passes leading from the north-west, the west, and south-west to the Holy City.

Turning from the Old Testament history to the study of the topography of the Gospels, it will be found that the survey of Palestine has not been without important results in illustration of the life of Christ. New information has been collected as to Bethabara, Emmaus, Ænon, Sychar, Antipatris, Capernaum, Cana, and Calvary.

Bethabara, "the house of the passage," was a place east of, but from its name and the fact that it was a place of baptism probably close to, the River Jordan. The ancient MSS. in many cases read Bathania (Bashan) for Bethabara; and though this may be considered to give some indication of the district intended by the Evangelist, there is sound authority in favour of the present reading, Bethabara.

This place, which we often speak of as the site of the Baptism of Christ, is noticed in only one passage as the scene of events succeeding the Temptation. Cana of Galilee was apparently at the distance of not more than a day's march (20 miles) from Bethabara, and this circumstance has given rise to much cavil on the part of commentators, who, assuming that the traditional site of Bethabara was indisputably the correct one, have argued the impossibility of a journey of some 80 miles or more having been accomplished by Christ in a single day. This objection the surveyors have removed in the discovery of the Jordan ford to which the name *'Abâra* still clings, just as the name of the city Adam also still survives at the lower ford of Damieh. The newly discovered ford is only some 20 miles from the most probable site of Cana (*Kefr Kenna*), and leads over to the lands of Bashan, the Bathania of the time of Christ. Sheet IX.)

The identification of Emmaus is another instance of the importance of minute examination of the ground. The district where the supposed site is found was fairly well known, but the ruin hidden in a well-watered valley among gardens of lemon and orange had not previously been explored. It was generally recognized by scholars that the Emmaus, where Christ supped with two Disciples, could not be the same as the famous Emmaus Nicopolis where Judas conquered the Greeks.

The latter city was 160 stadia from Jerusalem, but the village Emmaus, where Herod's soldiers were settled, was both according to St. Luke, and also according to Josephus, only 60 stadia distant from the capital, The name Emmaus is a corruption of the Hebrew *Khammath*, a "hot spring," applied to medicinal springs, even when not of very high temperature, as at Emmaus Nicopolis. The ruin which has now been found at nearly the exact distance (bostadia) from Jerusalem, is called *Khamasa*, thus representing the vulgar pronunciation of the Hebrew original. Ancient rock-cut sepulchres and a causeway mark the site as being of considerable antiquity, and the vicinity is still remarkable for its fine

supply of spring water. Among the numerous sites proposed for Emmaus there is none which has so many arguments in its favour as has the new discovery of the survey party. (Sheet XVII.)

With respect to Ænon and Sychar, the Surveyors have only confirmed the views advocated by Dr. Robinson and Canon Williams. The existence of "much water" and of open ground suitable for the assembly of a crowd has now been pointed out in the vicinity of the village Sâlim or Salem, and of the ruin 'Ainûn or Ænon.

Of the numerous sites previously proposed there is no other which unites every requisite of name and water supply. Other Ænons exist far from any Salem, and other Salems in water districts where no name Ænon is found; but in the Great Wâdy Fâr'ah, which, starting at Shechem, formed the north boundary of Judea, in the Jordan valley, we find a site which appears to satisfy every requirement and to agree well with the new identification of Bethabara. (Sheet XII.)

As regards Sychar, Canon Williams has argued in favour of the village 'Askar, close to Jacob's well—a hamlet apparently overlooked by Robinson. The survey investigations have shown that the ancient Samaritan name of this village closely approached to the Hebrew Sychar, and the error first made by the crusaders, who confounded Sychar with Shechem, and which has subsequently been adopted by Dr. Robinson, in spite of the evidence of the early travellers of the fourth to the seventh centuries, and which has found its way into the pages of Canon Farrar's Life of Christ, may now be corrected through the explorations which prove the antiquity and ancient name of the village 'Askar near Jacob's well. (Sheet XI.)

Antipatris, long since supposed to have stood at the great mound of Râs el 'Ain, is now proved to have been so situated through careful measurement to surrounding places and through comparison of these distances with those recorded by ancient pilgrims. As regards Bethsaida the evidence is purely negative, no trace of the name of the supposed Galilean Bethsaida having been found. The theory that two Bethsaidas existed on the shores of the Sea of Galilee was originated by the learned Reland, and has been adopted by many authorities. Lieutenant Conder, however, agrees with Renan and Robinson in supposing that only one site of that name existed, namely, the village afterwards named Julias, east of the Jordan and not far from its mouth.

As regards Capernaum, the authorities are still divided into two parties. Lieutenant Conder and Lieutenant Kitchener agree with Robinson, Renan, and many others in placing this city at the ruin Minyeh (the "town of the Minim" or Christian heretics who are called in the Talmud "Sons of Capernaum"). Colonel Wilson, R.E., has, however, clearly shown that from the fourth century down, Tell Hûm has been the traditional site of this town, and assumes that the Christian tradition is correct. Much still remains to be done to elucidate this subject; careful levels along a line of aqueducts are required, and excavations at Minyeh are very desirable.

A site which, though not scriptural, was of much importance for the understanding of the topography of the Sea of Galilee, was recovered by Lieutenant Kitchener in the modern Sinn-en-Nâbra, the ancient Sinnabris. This discovery supports the generally received identification of the important town of Tarichea (Kerak), which owing to a misconception has been placed on recent maps north instead of south of Tiberias.

The question of the boundaries of Samaria in the time of Christ is one not a little important to the understanding of His journeys through Peræa. By the recovery of Anuath ('Aina), Borceos (Berkît), Antipatris, Beth-Rima, and other places, we have been able for the first time to lay down the line of the border between Judea and Samaria with considerable accuracy of detail, and to show the necessity of the journey across Jordan in passing from Galilee to Jerusalem. (Mark x, 1.)

Without entering into the famous controversy as to the site of Calvary, it should be noticed that an important piece of novel information bearing on the question has been collected during the course of the survey. The place of execution used by the Jews before the destruction of Jerusalem, and called in the Talmud Beth-has-Sekilah, or the "house of stoning," is still shown by their modern descendants outside the Damascus gate north of the city. To Christians it is known as the cliff of Jeremiah's grotto, in consequence of a tradition which is only traceable as far back as the fifteenth century. The fact that a precipice is mentioned (in the Talmudic account of the punishment of stoning) as existing at the place of execution appears to confirm the tradition. This spot has according to modern authorities always been outside Jerusalem, and some travellers think they have observed a skull-like formation in the hill-top above the cave such as the early fathers often attribute to Golgotha. That Christ was executed according to Roman custom rather than the Jewish is certain; but there is no reason to suppose that Jerusalem possessed two places of execution at the time—the conservatism of the east would indeed point to an opposite conclusion. If the Jewish tradition be trustworthy we see in the site thus recovered an identification which possesses in a high degree a claim on our attention, as one of the most important that can be expected in Palestine.

The discoveries thus far described have been mainly topographical, as must be naturally expected from the character of the work undertaken. The survey party, however, enjoyed unusual opportunites for the study of the manners and customs of the native peasantry and of the Bedawin, in districts where a Frank had sometimes never been seen before; and from this intimate intercourse many interesting results were obtained in illustration of the manners and customs of the lower classes as described in the Bible. A detailed account of many of these discoveries will be found in the last chapters of "Tent Work in Palestine," published by the Committee, which are devoted to the description of various nationalities to be found in Syria.

The antiquity of the native peasant stock is evidenced both by their language and by the peculiarities of their religion. Their pronunciation of

many letters is archaic, and approaches much closer to the Aramaic or to the Hebrew than to modern Arabic. There are also many pure Hebrew words in use among the Fellahîn which are unintelligible to the inhabitants of towns who use the modern Arabic words instead. The worship of Mukâms or "Shrines" among the peasantry is also intimately connected with the old worship of trees and high places by the Canaanites, although the traditions attaching to these sacred places are traceable to crusading, Byzantine or Moslem origin as well as in other cases to an older indigenous source.

In manners, customs, and dress the peasantry recall the incidental notices of the same population in pre-Christian times. The "round tires like the moon," against which Isaiah declaimed, are still worn by the women of Samaria. Like Jezebel, they still paint their faces; like Elijah, the men still gird up their loins. The "corner of the field" is still left for the poor, and a tithe of corn for the Levite (or Derwîsh). The harvest customs and methods of tillage are unchanged; the olives are still beaten down with a rod. These are but single instances of the numerous scriptural expressions which are now illustrated by the customs of the Syrian peasantry. The nomadic life of the early patriarchs is in the same way illustrated by the manners of the Bedawin of the deserts, and, as above stated, the settled and pastoral districts retain the same relative position as in earlier times.

Such, briefly sketched, are a few of the principal Biblical gains accruing from the Survey. Until the voluminous memoirs have been placed before the public little idea will be gained of the amount of information and minuteness of detail which has been obtained. Many of the traditions of the country are carefully registered with the archæological remains and the natural features of the land, and the aid of all standard works, from Josephus downwards, has been called in requisition to explain by historical connections the origin and date of every monument. Though discoveries may still remain to be made in Palestine, we are probably justified at least in saying that no such complete account exists of any other Asiatic country as is now obtained for the Holy Land.

INDEX OF LIEUT. CONDER'S IDENTIFICATIONS.

N.B.—The Roman Numerals I, II, &c., refer to the Sheets of the Map.

1. *Abel Meholah*, 1 Kings iv, 12. Jerome (Onomasticon s.v., Abel Maula) places this 10 miles south of Scythopolis "in Aulone" (*i.e.*, the Jordan Valley) which indicates the present *'Ain Helweh*. (XII.)
2. *Abez*, Joshua xix, 20. Probably the present ruin *el Beida*, at the north end of the plain of Esdraelon. The Arabic exactly corresponds to the Hebrew with the same meaning, "white." (VIII.)
3. *Achshaph*, Joshua xix, 25. Wrongly placed by Robinson near Banias, probably the present village *el Yasîf*, north-east of Acre.

It is often mentioned in Egyptian records, and the proposed site agrees both with these and with the Biblical indications of situation. (III.)

4. *Adami*, Joshua xix, 33. The present ruin *Admah*, on the plateau south-west of the Sea of Galilee, in a satisfactory position with relation to towns noticed in the context. (IX.)
5. *Adasa*, see p. 15. (XVII.)
6. *Adullam*, see p. 14. (XXI.)
7. *Aenon*, see p. 17. (XII.)
8. *Ai*, see p. 4. (XVII.)
9. *Amad*, Joshua xix, 26. Apparently the ruin called *el 'Amûd*, north of Acre, in correct relative position. (III.)
10. *Anab*, Joshua xv, 50. The ruin *'Anâb*, west of edh Dhaherîyeh, incorrectly fixed by Robinson at Deir esh Shems, east of the same. (XXV.)
11. *Anaharath*, Joshua xix, 19. The village *en Na'ûrah*, in correct relative position to other towns of Issachar. (IX.)
12. *Anem*, 1 Chronicles vi, 73. The village *'Anîn*, in the hills west of the plain of Esdraelon, in a satisfactory position within the border of Manasseh. (VIII.)
13. *Aner*, I Chronicles vi, 70. Possibly the present village *'Allâr*, in the hills south-west of the plain of Esdraelon.
14. *Arab*, Joshua xv, 32. The present ruin *er Rabîyeh* in suitable relative situation. (XXI.)
15. *Archi*, see p. 10. (XVII.)
16. *Ataroth Adar*, see p. 10. (XVII.)
17. *Baalath*, Joshua xix, 44 ; 1 Kings ix, 18 ; VIII Ant. vi, 1. Probably the present village *Bela'în*, in a suitable position west of Bethhoron and commanding the main road to Jerusalem. (XIV.)
18. *Baal Shalisha*, 2 Kings iv, 42. Probably the present villarge *Kefr Thilth*, in suitable situation in the territory of Ephraim on the lower hills. The Arabic *Thilth* is derived from the Hebrew *Shalish* ("three"). (XIV.)
19. *Bahurim*, see p. 14. (XVII.)
20. *Berea*, see p. 15. (XVII.)
21. *Beten*, Joshua xix, 25. Is identified by Eusebius (Onomasticon s.v., Batnai), with a village, Beth Beten, 8 miles east of Acre. This seems to indicate the village *el Baneh*. (IV.)
22. *Bethabara*, see p. 16. (IX).
23. *Beth Dagon*, Joshua xix, 27. Probably the present ruin *Tell D'aûk*, in correct relative position near the mouth of the river Belus. (Compare Dagon or Docus, near Jericho, now 'Ain Dûk). (V.)
24. *Beth Shemesh* (of Issachar), Joshua xix, 22. Possibly the ruined site *'Ain esh Shemsîyeh*, in the Jordan Valley. (IX.)
25. *Bethulia*, see p. 15. (VIII.)
26. *Betomestham* (Judith iv, 6). The present ruin *Massîn*. (VIII.)
27. *Bezek*, Judges i, 5. Probably the ruin *Bezkah*, south of Lydda. (XIII.)

28. *Bezek*, I Samuel ii, 8. See p. 13. (XII.)
29. *Calvary*, see p. 18. (XVII.)
30. *Charashim* (Valley), 1 Chronicles iv, 14, mentioned in connection with Lod and Ono (Nehemiah xi, 35). The name survives at *Khurbet Hirsha*, on the bank of the great valley east of Lydda. (XVII.)
31. *Chezib*, Gen. xxxviii, 5 ; Joshua xv, 44. The name appears to linger at the spring *'Ain Kezbeh*, near Beit Nettîf, in a satisfactory position in relation to other towns of the same group. Jerome (Onomasticon s.v.) makes Chasbi a ruined site near Adullam, which agrees. (XXI.)
32. *Choba* or *Chobai*, Judith iv, 4. The Peutinger Tables place Coabis 12 miles south of Scythopolis. This points to the ruin called *el Mekhobby*, on the ancient road from Shechem. The name has the meaning "hiding place." (XII.)
33. *Chozeba*. 1 Chronicles iv, 22. Possibly the ruin *Kuieziba*, north-east of Hebron. (XXI.)
34. *Dannah* ("low ground"), Joshua xv, 49. Probably the village *Idhnah* in the low hills. The position appears suitable. (XXI.)
35. *Debir*, see p. 10. (XXV.)
36. *Diblath*, Ezekiah vi, 14. Apparently the village *Dibl*, in Upper Galilee, unless it be an error for Riblah. (IV.)
37. *Ebenezer*, see p. 13. (XVII.)
38. *Edrei*, Joshua xix, 37. Apparently the present village *Y'ater*. The relative position is suitable, and the letters T and D often interchanged. (IV.)
39. *Eleasa*, see p. 15.
40. *Eleph*, Joshua xviii, 28. The present village *Lifta*, west of Jerusalem The situation agrees with the boundary of Judah. See p. 10.
41. *Elon*, Joshua xix, 43. Probably the present village, *Beit Ellâ*. The relative situation is satisfactory. (XIV.)
42. *Elon Beth Hanan* ("plain of B. Hanan"), I Kings iv, 9. Probably the village *Beit 'Anân*, in the low hills east of Lydda. The situation agrees with the context. (XVII.)
43. *Emmaus*, see p. 16. (XVII.)
44. *Eltekeh*, Joshua xix, 44. Apparently *Beit Likia*, in the territory of Dan. In the list of the victories of Sennacherib (Assyrian Discoveries, pp. 302-305), the "plains of Eltekeh" are mentioned with towns of Dan. This agrees with the situation of the modern village. (XVII.)
45. *Enam*, Joshua xv, 34. Possibly the ruin *'Allîn*, in the low hills south-west of Jerusalem. The relative situation appears satisfactory. The change of N to L and M to N is not unusual. (XVII.)
46. *Engannim* (of Judah), Joshua xv, 34. Apparently the present ruin *Umm Jina*. The relative situation is satisfactory. (XVI.)
47. *Enhaddah*, Joshua xix, 21. Probably the present ruin *Kefr Adân*, south-west of the Plain of Esdraelon. The situation appears probable. (VIII.)
48. *Eshean*, Joshua xv, 52. Possibly the ruin *es Simia*, near Dumah (Dômeh), south of Hebron. The situation is satisfactory, and the site ancient. (XXI.)

49. *Esora*, Judith iv, 4. Probably the village *'Asîreh*, north of Shechem. The situation is suitable. (XI.)
50. *Etam*, 2 Chronicles xi, 6. The present ruin *'Aitûn*, south-west of Hebron. The situation agrees with the context. (XX.)
51. *Etam* (Rock). See p. 13. (XVII.)
52. *Ether*, Joshua xv, 42. Probably the ruin *el 'Atr*, near Beit Jibrin, on the west. The situation appears satisfactory. (XX.)
53. *Gallim*, 1 Samuel xxv, 44 ; Isaiah x, 30. Possibly the village *Beit Jâla* near Bethlehem. (XVII.)
54. *Gederah*, Joshua xv, 36. (Mentioned in the Onomasticon, s.v. Gedor, as 10 miles from Eleutheropolis, on the road to Diospolis), the important ruin of *Jedîreh*. The situation appears to agree with the context. (XVI.)
55. *Gederah* (of Benjamin), 1 Chronicles xii, 4. The present ruin *Jedîreh*, north of Jerusalem. (XVII.)
56. *Gederoth*, Joshua xv, 41. Probably from its situation the present village *Katrah*, near Yebnah, as proposed also by Colonel Warren, R.E. (XVI.)
57. *Gezer*, see p. 8. (XVI.)
58. *Gibbethon*, Joshua xix, 44. Probably the present village *Kibbiah*, at the foot of the hills near Lydda. The situation agrees with the context. (XIV.)
59. *Gibeah*, Joshua xviii, 28. The present ruin *Jibîa*, in the territory of Benjamin. (XVII.)
60. *Gibeah-ha-Elohim*, I Samuel x, 5 ; and I Samuel XV, 3. See p. 14.
61. *Gibeah Phinehas*. See p. 9. (XII.)
62. *Gilead Mount*. See p. 12. (IX.)
63. *Gilgal*. See p. 8. (XVIII.)
64. *Giloh*, Joshua xv, 51. Probably the ruin *Jâla* in the Hebron Mountains. The situation appears to agree with the context. (XXI.)
65. *Hachilah* (Hill). See p. 14. (XXI.)
66. *Hammon*, Joshua xix, 28. Apparently the ruin *Hima*, south-east of Tyre. The situation appears to be satisfactory. (III.)
67. *Hannathon*, Joshua xix, 14. On the boundary of Zebulon and Naphtali. The present village *Kefr 'Anân*. (VI.)
68. *Haphraim*, Joshua xix, 19. In the Onomasticon, s.v., the village Affarea is placed 6 miles north of Legio (*el-Lejjûn*) ; this fixes it at the ancient ruined site *el Farrîyeh*, which appears to be a suitable position for the Biblical town. (VIII.)
69. *Hareth*. See p. 14, now *Kharâs*. (XXI.)
70. *Harod*. See p. 12. (IX.)
71. *Hazor*, Joshua xi, 1. See p. 8, *Hadîrch*. (IV.)
72. *Hazor*, Nehemiah xi, 33. Evidently the ruin *Hazzûr* north of Jerusalem. (XVII.)
73. *Horem*, Joshua xix, 38. Apparently the ruin *Hûrah*. The situation seems possible. (IV.)

74. *Hozah*, Joshua xix, 29. Apparently the present ruin *Ozzîyeh*, on the coast south of Tyre. The situation is satisfactory, and the changes of *'Ain* for *Kheth* and of *Zain* for *Tzadi*, are both recognized. (III.)
75. *Ijon* ("ruin"), 1 Kings xv, 20. Possibly *Khiyâm*, in the *Merj 'Ayûn*, west of Banias. The name survives in the latter title, but the former may be a corruption and represent the exact site. (II.)
76. *Irpeel*, Joshua xviii, 27. Probably the village *Râfât*, north of Jerusalem. The name is derived from a similar root, and the situation is satisfactory. (XVII.)
77. *Jabneel*, Joshua xix, 33. A town of Naphtali stated in the Jerusalem Talmud (Megillah i, 1) to have been called at a later period Caphar Yama. This indicates the ruin *Yemma*, and the situation agrees with that of the other towns in this group. (VI.)
78. *Janoah*, 2 Kings xv, 29. The present village *Yanûh* in the hills south-east of Tyre. The situation appears satisfactory as within the territory of Naphtali. There is a second *Yanûh* further south. (II.)
79. *Janum*, Joshua xv, 53. Probably the village *Beni Naim*, east of Hebron. The situation appears to agree with the context. (XXI.)
80. *Jeshanah*, 2 Chronicles xiii, 19. The situation points to th iedentity of this site with the ancient village *'Ain Sinia*. (XIV.)
81. *Jeshua*, Nehemiah xi, 26. Probably the present ruin *S'awi*, east of Beersheba. The situation is relatively satisfactory. (XXV.)
82. *Jethlah*, Joshua xix, 42. Probably the ruin *Beit Tûl*, in the low hills west of Jerusalem. The situation appears probable. (XVII.)
83. *Joktheel*, Joshua xv, 38. Belonging to a group of which little is yet known. Possibly the large ruin *Kutlâneh*, south of Gezer. The words are from similar roots. (XVI.)
84. *Kedesh* (in Issachar), I Chronicles vi, 72. Possibly the ancient site *Tell Abu Kudeis* near Lejjûn. (VIII.)
85. *Kibzaim*, Joshua xxi, 22. The name is radically identical with that of *Tell Abu Kubâs*, near Bethel. The situation is not impossible. (XVII.)
86. *Kirjath*, Joshua xviii, 28. The present Kuriet el 'Anab is more generally known to the natives as *Kurieh*. The situation agrees well for Kirjath of Benjamin, but not for Kirjath Jearim. (XVII.)
87. *Kirjath Jearim*. See p. 13. (XVII.)
88. *Lachish*, Joshua x, 3. (In the Onomasticon, s.v., this city is placed 7 Roman miles south of Eleutheropolis (B. Jibrîn). The site of Tell el Hesy nearly agrees with this, and is more satisfactory than *Umm Lakis* proposed by Robinson. The identification supposes the change of Caph to Kheth, of which we have an accepted instance in the case of Michmash. (XX.)
89. *Lahmam*, Joshua xv, 40. Possibly the ruins *el Lahm*, near Beit Jibrin. The situation appears satisfactory, the site is ancient. (XX.)
90. *Lasharon*, Joshua xii, 18. Apparently in Lower Galilee. Possibly the ruin *Sarôna*, west of the Sea of Galilee. Jerome (Onomasticon, s.v.) says that the plain east of Tabor was called Sharon in his time. (VI.)

91. *Luz*, Judges i, 26. Possibly the ruin Lueîzeh, west of Banias, on the border of the Hittite country. (II.)
92. *Maarath*, Joshua xv, 59. Probably from its relative position the present village *Beit Ummar* (the Bethamari of the Onomasticon). (XXI.)
93. *Madmannah*, Joshua xv, 31. Possibly the ruin *Umm Deimneh*, north of Beersheba. The situation appears satisfactory. (XXIV.)
94. *Madon*, Joshua xi, 1. Apparently in Lower Galilee, perhaps the ruin *Madîn* close to Hattîn. (VI.)
95. *Mahaneh Dan*, see p. 13. (XVII.)
96. *Makkedah*, see p. 9. (XVI.)
97. *Manahath*, 1 Chronicles viii, 6. Possibly the village *Mâ'hah*, south-west of Jerusalem, which appears to be the Manocho of Joshua xv, 60 (inserted passage in LXX). The change of L for N is common.
98. *Maralah*, Joshua xix, 11. According to the description of the boundary of Zebulon, this would occupy about the position of the present village *Malûl*. The L and R are easily convertible. (VIII.)
99. *Mearah*, Joshua xiii, 4. Apparently *Mogheirîyeh*, north of Sidon.
100. *Megiddo*, see p. 15. (IX.)
101. *Meronoth*, 1 Chronicles xxvii, 30. Possibly the ruin *Marrîna*, in the Hebron hills. (XXI.)
102. *Misheal*, Joshua xix, 26. Probably the ruin *Maîsleh*, near Acre. The situation is suitable for a town of Asher. (III.)
103. *Mozah*, Joshua xviii, 26. According to the Jerusalem Talmud, was called Kolonia. A ruin called *Beit Mizzeh* exists near Kolônia, west of Jerusalem, in a suitable situation. (XVII.)
104. *Naamah*, Joshua xv, 41. Probably *Na'âneh*, south of Ramleh, as proposed by Colonel Warren, R.E. The situation is suitable. (XVI.)
105. *Nahallal*, Joshua xix, 15. According to the Jerusalem Talmud (Megilla i, 1) this place was called, at a later period, Mahlul. This seems to indicate the village *'Ain Mahil*, in a suitable position. (VI.)
106. *Nebo*, Ezra ii, 29. Perhaps *Nûba*, south of Jerusalem. (XXI.)
107. *Neiel* (Han-N'aial), Joshua xix, 27. The ruin *Y'anîn* is found in the required position. The change in the position of the guttural and of N for L is not unusual. (V.)
108. *Nekeb*, Joshua xix, 33. The Jerusalem Talmud (Megilla i, 1) gives the later name of this site as Siadetha. This points to the ruin *Seiyada* on the plateau west of the Sea of Galilee, a position agreeing with the context. (VI.)
109. *Nephtoah*, Joshua xv, 9 (a spring). The Talmud of Babylon (Yoma 31*a*) identifies this with the En Etam, whence an aqueduct led to the Temple. This indicates *'Ain 'Atân*, south of Bethlehem. See p. 10. (XVII.)
110. *Ophrah*, Judges vi, 11. Probably Ferâta, near Shechem, the ancient name of which was Ophrah (see Samaritan Chronicle). (XI.)
111. *Pirathon*, Judges xii, 15, and Pharathoni (I Macc. ix, 50).

Possibly *Fer'ôn*, west of Shechem. The loss of the T is not unusual, and the present name retains the guttural. (XI.)

112. *Rabbah*, Joshua xv, 60. Possibly the ruin *Rubba*, west of Beit Jibrîn. (XXI.)
113. *Rabbith*, Joshua xix, 20. The present village *Râba*, south-east of the plain of Esdraelon, appears to be in a suitable position. (XII.)
114. *Rakkon* ("shore"), Joshua xix, 46. The situation of *Tell er Rakkeit* appears suitable, north of Jaffa, near the mouth of the river Aujeh (probably Mejarkon). (XIII.)
115. *Sarid*, Joshua xix, 10. The Syriac version reads Asdod, and the LXX reads Seddouk (Vat. MS.). The original may be thought to have been Sadid, in which case *Tell Shadûd* occupies a very probable position for this site (compare Maralah). (VIII.)
116. *Secacah*, Joshua xv, 61. In the Judean desert. Possibly the ruin *Sikkeh*, east of Bethany. (XVII.)
117. *Sechu*, see p. 14. (XVII.)
118. *Seneh* (Rock), see p. 14. (XVII.)
119. *Shaaraim*, Joshua xv, 36. The ruin *S'aîreh*, west of Jerusalem, occupies a suitable position. (XVII.)
120. *Shamir*, Joshua xv, 48. Probably the ruin *Sômerah*, west of Dhâherîyeh, the situation being suitable to the context. (XXIV.)
121. *Sharuhen*, Joshua xix, 6. Probably *Tell esh Sheri'ah*. The position is suitable, and the conversion of the guttural Kheth to 'Ain is of constant occurrence, as is also the loss of the final N. (XXIV.)
122. *Sorek* (Valley). The name *Surîk* was found applying to a ruin north of this valley, as mentioned in the Onomasticon. (XVII.)
123. *Thimnatha*, Joshua xix, 43. Generally identified with Timnah of Judah, appears more probably to be *Tibneh*, north-east of Lydda, on the border of Dan. (XIV.)
124. *Timnath Heres*, see p. 9. (XIV.)
125. *Tiphsah*, see p. 15. (XIV.)
126. *Tirzah*, see p. 15. (XII.)
127. *Ummah*, Joshua xix, 30. The ruin *'Alma* occupies a suitable position in the territory of Asher. The L represents the Hebrew M and the guttural is preserved. (III.)
128. *Uzzen Sherah*, 1 Chronicles vii, 24. Mentioned with Bethhoron. Possibly *Beit Sîra*, south-west of the site of Bethhoron. (XVII.)
129. *Zaanaim*, see p. 11. (VI.)
130. *Zartanah*, 1 Kings iv, 12. Mentioned as "beneath Jezreel." Probably the large site of *Tell Sârem*, near Beisân. (IX.)
131. *Zereda*, 1 Kings xi, 26. In Mount Ephraim. Probably the present *Surdeh*, west of Bethel. (XIV.)
132. *Ziz* (Ha Ziz) (ascent of), 2 Chronicles xx, 16. Probably connected with the name Hazezon Tamar, for Engedi, Genesis xiv, 7; 2 Chronicles xx, 2. The name *Hasâsah* was found to apply to the plateau north-west of Engedi. (XXII.)

This list contains 132 names. Out of about 620 topographical names mentioned in the Bible in Western Palestine, about 430 have now been identified (or about two-thirds). Out of these 430 a total of 132, as above shown (or about a third), are thus due to the Survey.

On the other hand, out of about 200 names of the places in the Sinaitic Desert, or in the country east of Jordan, 70 only are known, including the latest identifications of the American survey and of Lieutenant Conder (Handbook to the Bible), being a proportion of little over one-third. Many important sites, such as Mahanaim, Jabesh Gilead, &c., remain still to be recovered east of Jordan.

SUPPOSED CLIFF IN THE HARAM.

Considerable importance has been attached to the question whether the rock on the western slope of the Temple Hill may be supposed to fall with an uniform slope, or whether beneath the surface and within the west wall of the Haram, a cliff exists hidden by the filling-in which forms the present interior plateau.

In discussing the paper which I had the honour to read to the Royal Institute of British Architects, on 2nd December, 1878 (see "Transactions R.I.B.A.," No. 3, p. 41), Mr. James Fergusson said :—

"So far as I can make out, and I believe I may state that Colonel Wilson entirely agrees with me in this : the rock rises gradually, though irregularly, from the valley of Jehoshaphat to a ridge terminating westwards in something very like a cliff, where I believe the tower of Antonia to have been, and just behind the Holy of Holies of the Temple where I place it."

This passage explains the reason why importance is held to attach to the question, for if no such cliff should exist, then the Temple as restored by Mr. Fergusson must have rested on foundations of great depth, or on vaults as yet undiscovered, and not described by any ancient author.

The difference of opinion as to this cliff is also shown in the plans published in the *Palestine Exploration Fund Quarterly Statement* for 1880, pp. 9 and 20, where Colonel Wilson shows the rock as rising much more rapidly than according to Colonel Warren's section would be the case.

As regards these plans it may be noted in passing that a slight misapprehension occurs in the Editor's note, p. 97, by which I am supposed to be responsible for the first-mentioned plan, and am said to differ from both of the above-mentioned authorities respecting the lie of the rock in this part of the Haram. My plan, constructed in 1873, was taken from Colonel Warren's "Recovery of Jerusalem," p. 298, so far as the contours within

the West Haram Wall are concerned, and any discrepancies in the lithograph would have been corrected had not the proof unfortunately failed to reach me before publication.

The main reason for supposing the existence of a cliff in this part of the mountain is a geological one. The strata beneath the Haram, as in other parts of Jerusalem and its vicinity, having a dip of about 10 degrees E.S.E., as described in the "Ordnance Survey Notes" (p. 3), so that a "crag and tail" formation, as it is termed, might be formed by the beds as exposed on the hill-sides; the "crag" or cliff being always on the west, and the "tail" or gentle slope on the east.

Cliffs, due to this position of the strata, occur towards the bottom of the western slope of Olivet, and are commonly found in Palestine in places where the hard crystalline lower beds are visible.

A closer inspection of the geological question seems to me, however, to be less favourable to the theory, and a few words are necessary to explain the problem more clearly.

The Mount of Olives consists mainly of soft chalky beds, the total thickness of which is given by Colonel Wilson at 291 feet, out of a height of some 400 feet from the present Kedron bed to the summit of the hill. The lower strata of the chalky beds are referred by L'Artet to the Upper Cretaceous Period, while near the summit of the mountain, separated by bands of flint, occur beds belonging to the Nummulitic or Middle Eocene period. Beneath the white chalk occurs a hard limestone, containing fossils and flints, with a total thickness of 71 feet; and beneath this, again, for a depth of 40 feet, the soft white Malaki beds, whence the best building stone is obtained; while, lower still, occurs the hard Dolomitic limestone, without flints or fossils, which extends lower than the Kedron bed.

According to these measurements the levels of the beds on the western slope of Olivet are as below:—

	Above the Sea.
Soft white chalk, bottom of bed	2,350
Fossiliferous limestone	2,279
Soft white limestone	2,239

On turning to the Ordnance Survey Map ($\frac{1}{2500}$), it will be observed that the level of the top of the cliffs in which the so-called Tombs of Absalom, St. James, etc., are cut, is shown as 2,235, or about the level of the junction between the hard underlying Dolomite and the soft chalky Malaki beds.

Above this level no cliffs occur. The Malaki has been worn by denudation to an even slope, and the soft chalk beds higher up the mountain present in the same manner an uniform slope instead of a cliff. The action of denudation has in short effaced the "crag and tail" formation which may have resulted from the original upheaval.

These observations may now be applied to the Temple Hill. The top formation within the Haram is the *Mezzeh* or fossiliferous limestone, and the cisterns are cut in the *Malaki* beneath it. Colonel Wilson describes the beds as dipping 15° N. and S., and about 10° E. and W. ("Ordnance Survey Notes," pp. 31-33). Near the north-west angle the Mezzeh beds have been removed to a depth of some 30 feet (compare Ordnance Survey Map and "Notes," p. 31). The Sakhrah consists of Mezzeh (p. 34), and near Tanks 12, 13, 14, there is only one bed of Mezzeh above the Malaki (p. 31), the surface level being 2,406.

The Mezzeh and the Malaki both belong to the Neocomian series, and are conformable with one another. The thickness of the Malaki where covered by the harder stratum is therefore most probably the same on the Temple Hill as on Olivet, viz., 40 feet.

From these data may be constructed sections to a natural scale with the following result as to the levels of the beds on the west side of the Haram :—

East and west section, through Sakhrah	East and west section at Prophet's Gate.
Bottom of Mezzeh, 2,435 ft. above sea	2,370 feet above sea.
Bottom of Malaki, 2,390 „	2,330 „
Thickness of Dolomite above valley bed } 40 feet	10 feet

These sections depend on the levels of the Sakhrah and the Tanks 12, 13, and 14; but if they were based on the observations in the north-west angle the level of the Dolomite junction with the Malaki would be made yet lower.

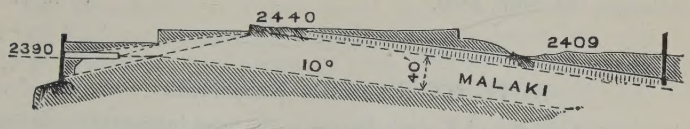
The levels near the Bâb es Silsileh, where Mr. Fergusson places Antonia, are as given below, on the same construction as the preceding :—

Bottom of Mezzeh	2,380 feet above sea.
Bottom of Malaki	2,340 „
Thickness of Dolomite above bottom of valley	10 feet

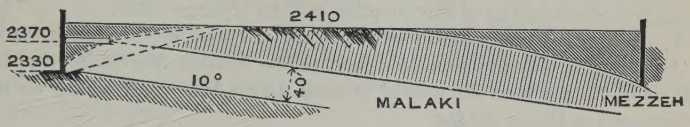
Now, as we know that the action of denudation on the Malaki and Mezzeh beds produces uniform slopes, and that cliffs are found only where the Dolomite comes to the surface—as observed on Olivet—we might expect a cliff near the base of the Haram Wall, and a gradual slope above it, where the soft chalky Malaki beds occur. The maximum height of the cliff would be only 40 feet (west of the Sakhrah), its top being 50 feet below the Sacred Rock. But at the points where Mr. Fergusson places Antonia and the Holy of Holies, the cliffs would be apparently only 10 feet high, and their tops respectively 90 feet and 100 feet below the Sakhrah. Thus if the dip of the strata is uniform, the mean height of cliff would be only about 20 feet, its top being 70 feet below the mean surface, and 100 feet below the Sakhrah. The existence of such a cliff would consequently have little bearing on the question of foundations.

GEOLOGICAL SECTIONS THROUGH HARAM.

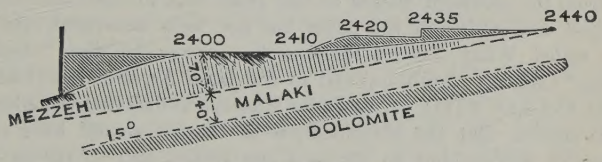
Natural Scale.



Section east and west through Sakhrah.



Section east and west through Prophet's Gate.



Section due south from Sakhrah.

Several indications may be noted as confirming this view with respect to the unseen portion of the Temple Hill.

1st. The tanks and galleries running in from the West Haram Wall, are lined with masonry, whereas, further east, where the rock is higher, they are simply cemented over the rough rock. This seems to indicate that the Western Tanks are not rock-cut, but only built in the made earth, and that the rock is consequently lower than the floors of these galleries.

2nd. It seems reasonable to suppose that had such a cliff as is conjectured to exist on the west side of the Haram actually occurred, the West Haram Wall would have been built upon it, rather than in the valley bed to the west of it.

3rd. Colonel Warren's shafts along the south wall indicate a gradual fall of the rock outside the Haram, and no cliff was found towards the west.

4th. In Tank No. 24 (the only one towards the west where a rock floor has been found), the rock falls westwards at an angle of 30°, which if continued would strike the level of the Tyropœan bed within the West Haram Wall, without necessitating any cliff or steeper dip.

This curious question has perhaps attained to greater importance than really belongs to it, for the top of the supposed cliff, if it existed, would be at least 50 feet lower than the Sakhrah, and 70 feet below the Barrack Scarp, but the problem has a controversial interest, and the objection briefly stated to the cliff theory is that the action of denudation on

soft chalky limestone would render the preservation of a cliff highly improbable.

Edinburgh, Oct. 20th, 1880. C. R. C.

NOTE ON KADESH BARNEA.

THE recovery of the site of Kadesh Barnea is the most interesting question of the topography of the Sinaitic Desert, and any indication leading to a clearer understanding of the question will be of some value.

In the account of the southern boundary of Palestine (Numbers xxxiv, 4; Josh. xv, 3), this site is noticed next to the Maaleh Akrabbim, and the next points to the west are named Hezron and Adar, or according to the earlier passage Hazar Addar.

The Maaleh Akrabbim has been recognised to be some part of the ascent from the southern shores of the Dead Sea, towards the plateau of the Negeb, and although the name has not been recovered, the great feature called Wâdy Fikreh appears to answer to the "Ascent of Scorpions" (Maaleh Akrabbim) and to the later Acrabbatene (1 Macc. v, 12; Ant. 812 Ant. VIII), where Judas Maccabæus defeated the Idumeans.

It is curious that the identification of Hezron should have escaped even careful writers, but so far as I am aware, and so far as can be gathered from Mr. Grove's articles in Smith's "Dictionary to the Bible," this site has not been recognised as yet.

The name Hezron is derived from the same root with Hazor, signifying "an enclosure," and the Arabic equivalent is properly speaking *Hadîreh*, having the same meaning and spelt with the *Dad*, which is one of the two Arabic equivalents of the Hebrew Tzadi, represented by the Z in Hazor (more correctly Khatzor), the other equivalent being the Arabic *Sad*.

There are two cases in which the name Hazor is similarly preserved in Arabic, one being 'Ain Hadîreh, representing the Hazeroth (plural of Hazor) which was one of the Israelite camps (Num. xxxiii, 17); the other being the Royal Hazor of Galilee, the name of which still survives, as discovered by the Survey Party, in the present Merj Hadîreh, west of the Waters of Merom.

We should, therefore, expect Hezron to appear in modern Arabic under the form Hadîreh (plural Hadâir), and on consulting the map it will be found that the prominent ridge north of the head of Wâdy Fikreh and west of the main route from Petra to Beersheba is called *Jebel Hadîreh*. (See Murray's Map, or the map opposite p. 238 of Conder's "Handbook to the Bible.")

If this identification be accepted, agreeing as it does very completely with the boundary line as usually laid down, then the site of Kadesh Barnea should be sought to the east of *Jebel Hadîreh*, probably on the main route which ascends by the well-known pass of the Nukb es Safa, which Robinson strove to show to have been the Zephath of Judges i, 17, and the Hormah of Deut. i, 44. It is, however, by no means certain that the Hormah ("destruction") of the latter passage, is the same place,

while Zephath if identical with Zephathah (2 Chron. xiv, 10), is to be sought much further north near Mareshah.*

This identification of Hezron would appear to be fatal to the claims of 'Ain Kades as representing Kadesh, and there are, on the other hand, many indications which seem to place Kadesh Barnea on the route from Petra to the vicinity of Tell el Milh (Malatha), Arad (Tell 'Arâd) and Hebron.

(1.) Kadesh lay between the deserts of Paran and Zin (Num. xiii, 26 and xxx, 1), whereas 'Ain Kades must have been in the Desert of Shur—the most western desert district, extending from Beersheba towards Egypt. Shur is translated Khalusa by Rabbinical writers, in reference to the important town of that name (now Khalisa, the Roman Elusa) north-east of 'Ain Kades.

(2.) Kadesh was on the border of Edom (Num. xx, 16), as was also Mount Hor (verse 23), whence the vicinity of Kadesh Barnea to Petra might be inferred, and indeed the Targum of Onkelos translates the name Kadesh by "Valley of Rekem" (or of Petra).

(3.) Kadesh was evidently not far west of the Dead Sea, as its name occurs second on the border line as described from the Salt Sea westwards.

(4.) After the defeat of Israel at Kadesh by the Amalekites, the pursuit extended to Seir (Deut. i, 44), or the ridge of Mount Hor.

(5.) The King of Arad attacked Israel (Num. xxi, 1), which agrees with the supposition that they were advancing from Mount Hor towards Palestine by the great route which leads up the Nukb es Sufa towards Tell Arâd.

(6.) The Israelites journeyed from Ezion Geber—at the head of the Gulf of Akabah to Kadesh, and thence to Mount Hor (Num. xxxiii, 35–37), their most probable route thus lying up the Arabah, which is both the easiest and the best-watered line of march towards the Palestine hills.

It is evident from a comparison of two accounts that Kadesh lay at the foot of a pass from the highlands. The Amalekites "came down" (Num. xiv, 45) from the "mountain" in which they dwelt (Deut. i, 44), and the site should thus perhaps be sought further north than the 'Ain el Weibeh of Robinson, or at the foot of the Nukb es Sufa, east of Jebel Hadîreh on the main route. I may perhaps venture to suggest that *Jebel Maderah*, facing the Nukb es Sufa on the south, may represent Adar near Hezron (Josh. xv, 3). A visit to this pass would be of great interest, and the names Kadesh (*Kades*), Mishpat (*Mishafât*), and Meribah (*Merîbeh* or *Umm Rîba*) should all be sought for below the pass of es Sufa near the junction of Wâdy Fikreh with Wâdy el Yemen.

C.R.C.

* The valley (Gia) of Zephathah is mentioned (2 Chron. xiv, 10) as "at Mareshah." On the survey a ruin called *Sâfieh* will be found 2½ miles north-east of *Mer'ash* (Sheet XX), close to the narrow valley above which stands Deir Nakhkhâsh. The name *Sâfieh* ("Shining,") is radically the same as Zephathah, and has the same meaning, and it seems clear that the "Ravine (*gia*) of Zephathah," is thus identical with the narrow valley below this ruin.